Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



BROWN SEED CATALOGUE monumento

Alfred J. Brown Seed Co. Grand Rapids, Mich.



TWENTY-EIGHTHA AMMUAL EDITION

Mirectul Brown Serector



Twrwrstagnar (A) Awron tarway

TESTED SEEDS

While profitable farming or gardening depends very largely upon the quality of the soil, fertilization, cultivation and climatic conditions, seeds really play the most important part as to whether the venture is a success or failure. No matter how fertile the soil, how thorough the cultivation or how favorable the season, you are doomed to disappointment and failure if you plant poor seeds. The words "Tested Seeds' implies more than the simple process of testing the seeds as to their percentage of vitality. What is of more vital importance to be considered is the pedigree from which the seeds actually originate. To ascertain real value in seeds it requires field trials and expert knowledge. This entails considerable outlay and when we say good seeds are worth more, we might go farther and say they are worth "much more." Seeds to be good must not only "grow," but they must be well grown from selected bulbs or plants. Having had nearly thirty years' experience in seed growing with a record behind them of continued success we do not hesitate to say that our seeds are as good as can be found, and are offered at reasonable prices, quite as low as good seeds can be afforded. The question often arises as to where our seeds are grown. We can only answer this question by saying that they are grown in the localities where soil and climate is best adapted to their culture. Selection upon selection of stock seed is the only sure method of improved types of vegetable and agricultural seeds, as well as flower seeds. The parentage must be good or the product will be poor. We will not handle or send out any seeds that have not been tested and found good, therefore you can depend upon them as far as the seeds themselves are concerned, but is beyond our power to guarantee the crop as there are so many contingencies that may arise at time of planting or during the growing season, such as planting too deep, too shallow in soil not adapted to their culture, cut worms that destroy the plants before they are hardly visible, chemical changes that destroy the vitality of the seed before the plants are above ground. These and many other contingencies make it very apparent that under such conditions we can not be held responsible for what happens to the seeds after they leave our hands. But we do know and can prove by our records that all seeds sent out are carefully tested and under normal conditions will grow. Our seeds have given the best of satisfaction for many years and it is our sole aim to have them continue to give satisfaction for years to come.

Seeds by Mail, Parcel Post, Express or Freight

As our seeds can be found in most towns throughout the State you can get them through your local dealer. But if you prefer to send direct please send the money with the order which will insure prompt service. We pay postage on seeds by the packet, ounce and quarter pound. For larger quantity the expense must be paid by the purchaser. 'All seeds f. o. b. no charge for cartage. We charge 22 cents for new 16 oz. cotton grain bags. Boxes and barrels free of charge.

Parcel Post Rates on Seeds

The rate on seeds or bulbs is not affected by the Parcel Post law. They are third class matter, requiring one cent for each two ounces, or fraction thereof, or eight cents per lb. regardless of distance, and we are allowed to mail up to eleven pounds.

Guarantee Shipments

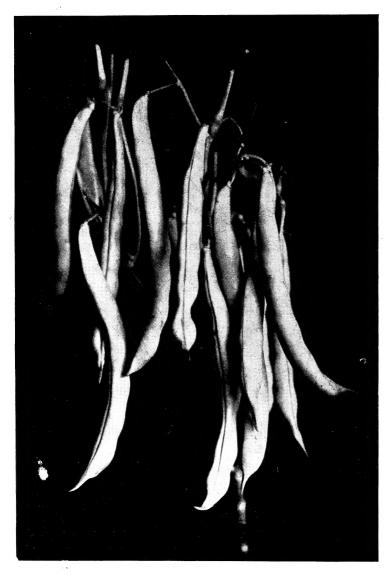
We guarantee the safe arrival of all Seeds sent out by us, in the regular way. If miscarried or damaged enroute, we will duplicate your order, but we will not be held responsible for any Seeds sent by freight to "prepaid" stations where there is no railroad agent to take care of the goods on arrival. If Seeds are ordered forwarded to such stations, the purchaser must assume all risk of goods going astray or stolen.

Our Responsibility

As there are so many contingencies that may arise at planting time, such as sowing too deep, too shallow, or in soil that is too wet and cold, or land that is too dry, late frosts, floods or drouth, cut worms that destroy the plants before they are visible, and various other causes, it is manifestly impossible for a seller of Seeds to be held responsible for what might happen to them after they leave his hands; therefore we, in common with all other American Seed houses, give no warranty, express or implied, as to description, purity, productiveness or any other matter, of any seeds, bulbs or plants we send out, and we will not in any way be responsible for the crop. If the purchaser does not accept the goods on these terms, they are to be returned at once and the money paid for same will be refunded.

ALFRED J. BROWN SEED CO.

Burpee's Stringless



Green Pod

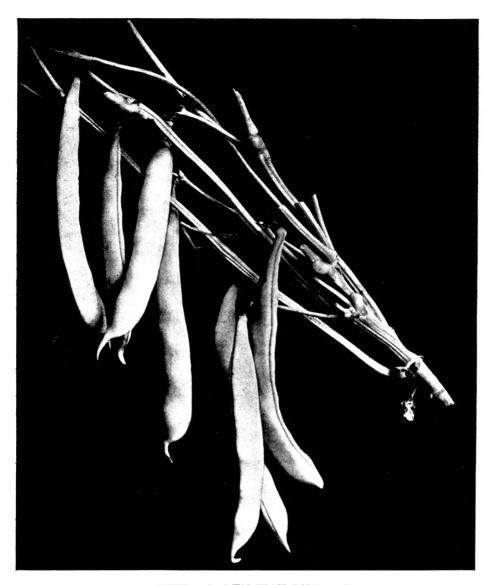
It combines unusual hardiness, extreme earliness, and wonderful productiveness with pods of handsome appearance and finest quality. Extra early plantings may be made to produce the earliest crop, and even with later plantings BUR-PEE'S "STRINGLESS" is the quickest to produce pods.

By repeated plantings pods may be had in constant succession from spring until cut off by heavy frosts in the fall. Combined with the extra hardiness and early maturity, the pods are the finest in quality, of a rich green, very round and straight, five inches long, solidly meaty and broad—deeply saddlebacked, caused by the rounded swell of the fleshy sides. The pods are tender, brittle, and of finest flavor, always entirely stringless even when fully matured.

BEAN CULTURE

CULTURE—There is nothing that responds more readily to good cultivation and soil than beans. We advise fall plowing to insure the best results. The land that is best adapted to beans is medium rich, well drained loam, which has been fertilized for a previous crop. As the plant is sensitive to both cold and wet, they should not be planted until the ground has become dry and warm. While the largest returns are obtained from planting in drills from two to three feet apart, good results may be had from planting in hills two feet apart each way. In this way the crop may be kept clean at less expense. It is not necessary to give the bean crop deep cultivation. If the ground is kept clean up till the time of blossoming, and the season favorable, success is sure. It is detrimental to the crop to cultivate after beans begin to set, as it will cause them to blast and injure the crop to a large extent.

IMPROVED GOLDEN WAX

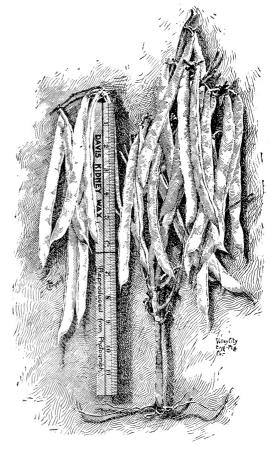


IMPROVED GOLDEN WAX BUSH BEAN.
The Standard Flat, Wax-Podded Variety.

Among the Yellow Wax-podded or "Butter" Beans, the Golden Wax has long been in popular favor, but this Improved variety by far surpasses the old favorite in several desirable points. The plants are of vigorous, bushey growth, not susceptible to rust, moderately early and very prolific. The pods are exceedingly handsome, large, uniformly broad, thick and almost of solid flesh, of good quality, tender and brittle, absolutely without string or coarse fibre at all stages until maturity, while the color is of a rich golden-yellow. Although not the earliest dwarf wax bean, its reliability in producing a heavy crop of large handsome pods, whether planted in spring, summer or early fall, renders it highly valuable for both home and market planting.







DAVIS KIDNEY WAX.

DAVIS KIDNEY

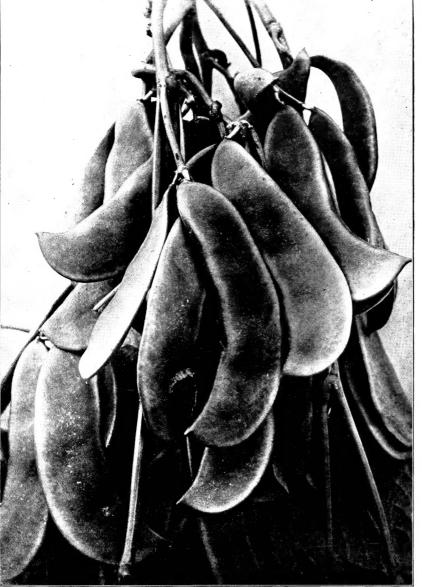


A TWENTY ACRE FIELD DAVIS KIDNEY WAX.

WAX

Introduced by us in 1892, and now widely grown throughout the United States and Canada. Very hardy and enormously productive.

The plant is strong and vigorous, carries the pods well to the center of the plant and so high that many are seen above the foliage. The seed is pure white, kidney shaped and excellent for baking. Pods are waxy-white, long, straight and handsome. A great favorite with market gardeners and southern shippers as well as canners.



HISTORY of the Lima Bean

PHASEOLUS LUNATUS MACROCARPUS BENTH.

(The Large Lima.)

Linnaeus believed that this bean was of African origin and classed it as a separate species. It is now understood to be of South American origin and probably gets its name from the City of Lima in Peru. Extensivly grown in this and other warm countries for green-shell and dry-shell purposes. Those of the potato type are more productive, more vigorous, and of better quality. Plant perennial in the South, grown as an annual in the North, vigorous grower, climbing or dwarf; leaflts large, ovate or ovate-lanceolate, thick, stiff, slightly pubescent, dull green; pods large, 3 to 6 inches long, 1 to 11/4 inches broad, flat, frequently twisted, point or spur very short or wanting; seeds very large, usually very flat and reniform (the potato type quite turgid and subreniform,) variously colored. It differs from the Sieva type chiefly being a perennial (in the South), in making a larger growth, in being less hardy, later in season, and in having larger leaves and pods. Many strains, differing chiefly in season and size of pod, are in cultivation. The type of many of these modified forms is not well fixed and, for this reason, it is difficult to make accurate description and comparison.





COPENHAGEN EARLY MARKET

This is the latest Danish Production of an Early Round Headed Solid Cabbage which has attained the highest achievement in Cabbage breeding. It is the earliest large round headed Cabbage yet introduced. The heads are of exceptional large size for so early a variety. It is a short stem plant of vigorous and compact growth, with few outer leaves. Matures about the same time as the Wakefield variety.

with few outer leaves. Matures about the same time as the Wakefield variety. Every plant seems to form a perfect tightly folded head, averaging in weight from five to eight pounds. The heads are round, very solid and of especially good quality. It is by far the most Early Summer Cabbage of recent introduction and we recommend it most

duction and we recommend it most highly. Market Gardeners growing Early Cabbage for the market should not fail to grow this variety.



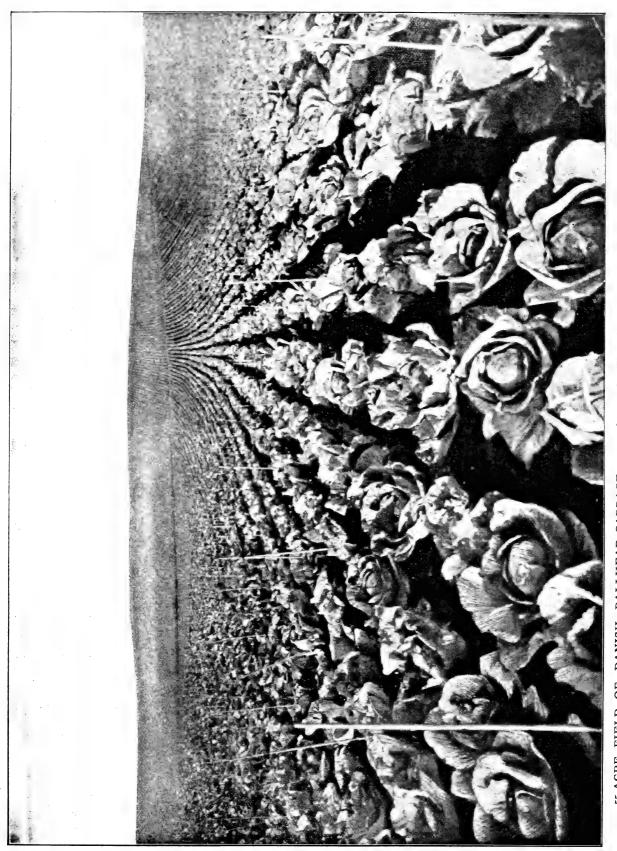
DANISH ROUNDHEAD OR HOLLANDER



RED CABBAGE ODENSE MARKET STONEHEAD

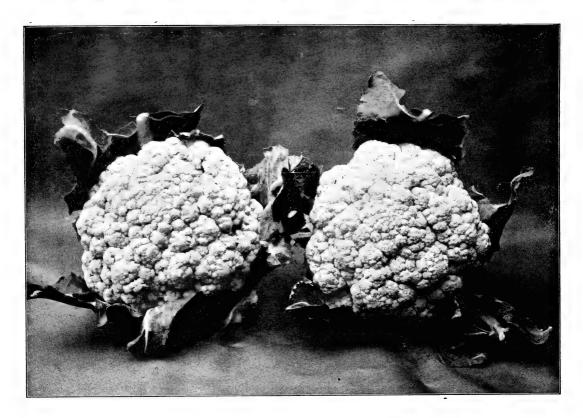


DANISH BALLHEAD Tall Stemmed Long Keeping Winter



55-ACRE FIELD OF DANISH BALLHEAD CABBAGE grown for seed. The plants marked with stakes are selected for stock seed. Our Danish Seed has given the best of satisfaction for many years past and has proven beyond a question of doubt to be far superior as to solidity and excellent keeping quality as well as sure headers.

TRUE SNOWBALL

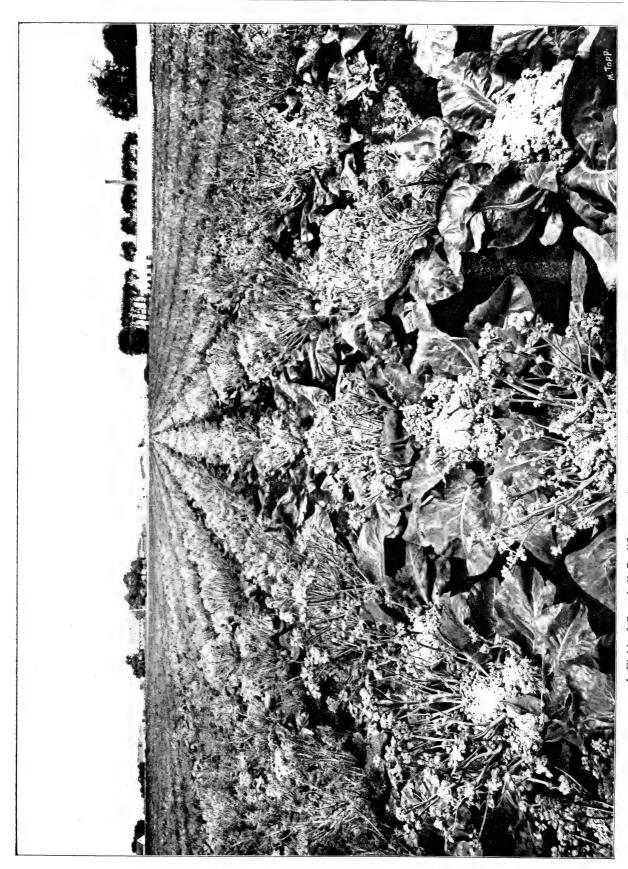


CAULIFLOWER

We import direct from Denmark the finest strain of Snowball Cauliflower to be had. For many years our seed has given the best of satisfaction, and as proof we might mention the statement of one of our customers who told us he sold a little over \$200.00 worth of cauliflower raised from one ounce of our seed. The dwarf compact habit and small number of leaves makes it the ideal cauliflower to grow for profit. It is not only a sure header, but the heads are of compact growth and snow white.

Such flower always command the highest prices and meets with ready sale.

Special Notice—To large cauliflower growers, who are not already our customers, we will be glad to furnish free sample for trial.



Taken from photograph on the Island of Amager. A Field of Snowball Cauliflower going to seed.

The Davis Perfect Cucumber



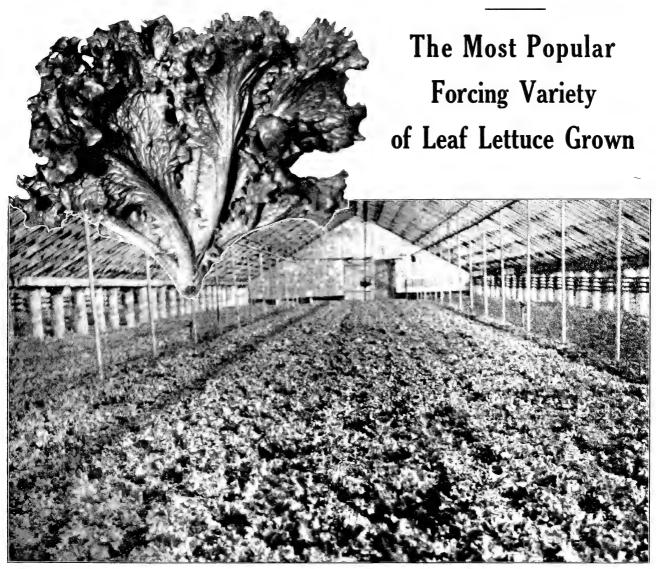
Originated by Eugene Davis and introduced by us in 1906. Now recognized by expert cucumber growers everywhere as being the best cucumber for forcing under glass or growing out doors.

Habit of growth vigorous and should not be planted as close together as other White Spine sorts. Fruit very dark, glossy, green; shape slim and symmetrical; average length about ten inches. Exceedingly crisp and tender, and seem to hold their color and freshness long after being cut. Not quite as early as some of the White Spine varieties, but will out-yield any of them and will sell when others are a drug on the market. The only cucumber for market gardeners to grow for profit, and the best for the home garden.

For the past four years, with the aid of the Originator, we have by careful selection been able to produce an excellent improved type of this splendid variety but having only a small quantity of seed saved from these selected types we cannot offer it in quantity of more than four ounces. Per Packet 15c, per ounce \$1.00, four ounces \$3.00.



Grand Rapids Forcing Lettuce



Photographic View of Half a House of Grand Rapids Forcing Lettuce Grown by the Originator, Eugene Davis

The Grand Rapids forcing lettuce that has become so famous was originated more than thirty years ago by Eugene Davis, well known to the Seed trade as the originator of the Davis Kidney Wax Bean, and Davis perfect cucumber. For years this famous variety of lettuce was carefully secluded by local lettuce growers before any one would part with even a pinch of seed. The first ounce of seed was sold to a Cincinnati grower for fifty dollars. Shortly afterwards the seed was sought for in many lettuce grow-

ing markets at extreme high prices and for many years this variety has been grown successfully, and today is the most popular forcing variety of leaf lettuce grown. Thousands of tons are grown and shipped to the largest markets in the United States annually The seed we offer is from select stock furnished us by the originator, and we have been growing it carefully for several years, selecting only such plants that are true to type, until we have the best stock of this seed to be found.

ROCKY FORD

THE MOST FAMOUS MUSK MELON

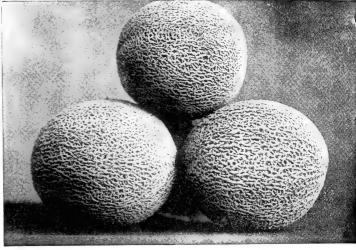
The Rocky Ford has proven to be the most valuable muskmelon in cultivation.

Its size, shape and quality has made it the most popular muskmelon grown. It resembles the old fashion netted gem, but is more oval in shape. The vines are vigorous, bearing an enormous amount of fruit. Hundreds of carloads are shipped every season from Colorado to all of the principal markets of the United States and Canada.

The color of the skin is a rich greenish gold. The flesh is very deep, and ripening clear to the rine. It is very solid and the meat is thick and luscious in flavor and leaves a small va-

cancy for the seed.

Our seed is grown for us at Rocky Ford, Colorado, by one of the most reliable grow-





PAUL ROSE

The Paul Rose Muskmelon produces a higher percentage of high quality table melons, than any other variety (except the Rocky Ford grown under irrigation).

This melon is a hybrid between the Osage and Netted Gem, combining the best points in both parents. It has the thick reddish salmon flesh, the firmness and cheesy structure of the Osage; the netting and shape resemble the Rocky Ford and the rich flavor is distinctly its own. Ripens ten days earlier than the Osage; is a perfect basket melon, does not break down in shipping.

VAUGHAN'S ORIGINAL OSAGE

The melon is known in all markets by name, on the bills of fare of many leading hotels and prominent restaurants in the largest cities of the United States. It is distinct, quite large, probably three times the size of the ordinary (Netted Gem), and has a deep salmon flesh which is of a peculiar cheeselike texture. The melon holds its good flavor in nearly all its fruits much better than most kinds, that is, a well-grown Osage Melon is seldom poor in quality, while many Gems and other types are found flat and insipid when cut, although the melons themselves appear to be all right. The Osage is well liked everywhere and each year finds an increased demand for Vaughan's type from consumers in the hotels and restaurants where melon buyers and users are most critical. Our type has a rather dark skin and moderately netted as shown in the illustration. The rich orange flesh is extremely thick and of finest flavor





WATERMELON

COLE'S EARLY

It is by far the best of the early Water Melons for growing in the Northern States.

It is early and very sweet. Not so large as some varieties, but what lacks in size is made up in its productiveness. The vines are very vigorous and productive, so that the yield per acre compares very favorably with the later varieties.

The flesh is a fine, red color, crisp, melting and sweet. Our seed of this variety, being northern grown, makes it a desirable melon to grow in this vicinity.

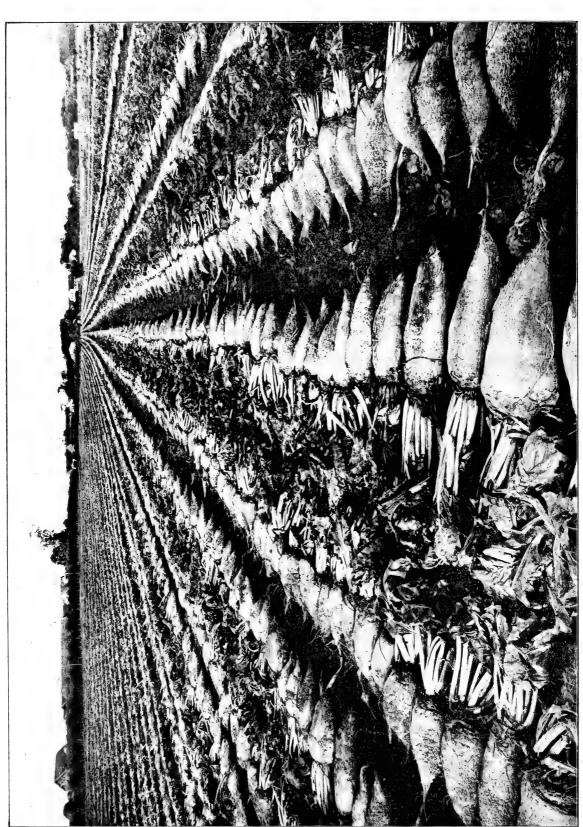
MUSHROOMS

Mushrooms can be grown in any dark room or cellar, where the temperature can be maintained at 50 degrees to 60 degrees. From old pasture procure the soil and store it away. To one bushel of this soil add two bushels of fresh horse manure. Of this well mixed compound prepare a bed, say four feet wide. Put down a thin layer and pound it down hard, and go on until you have a bed eight inches thick. It will soon become quite hot but let the heat recede until it is only 85 or 90 degrees. Then make holes, say a foot apart, and put in the spawn, two or three pieces as large as a walnut in each hole. Cover the holes and press the soil solid and smooth. Let the bed remain in this condition about twelve

days; then cover it with two inches of fresh loam, and over this place four or five inches of hay or straw, and the work is done. If the temperature is right, in six or eight weeks you may expect Mushrooms. The bed will continue bearing from twenty to thirty days. After the first crop is gathered, spread over the bed an inch of fresh soil, moisten with warm water, and cover with hay as before. Success is not always certain with the amateur, and is usually to be attained only after more or less experience. One pound of spawn is enough for a bed 3×6 feet.

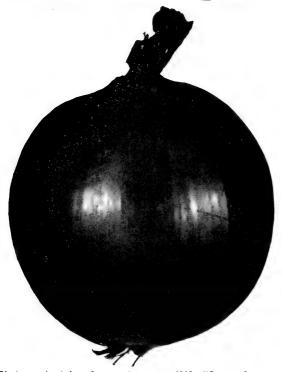
GARDEN CITY, pure culture, per 1b., 15c; 10 lbs., \$1.25.





Field of Stock Roots of Mangel-Danish Sludstrup.

True Southport Red Globe Onion



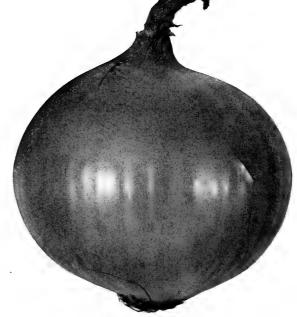
Photograph taken from nature crop 1912. "Grown from our

GOOD ONION SEED

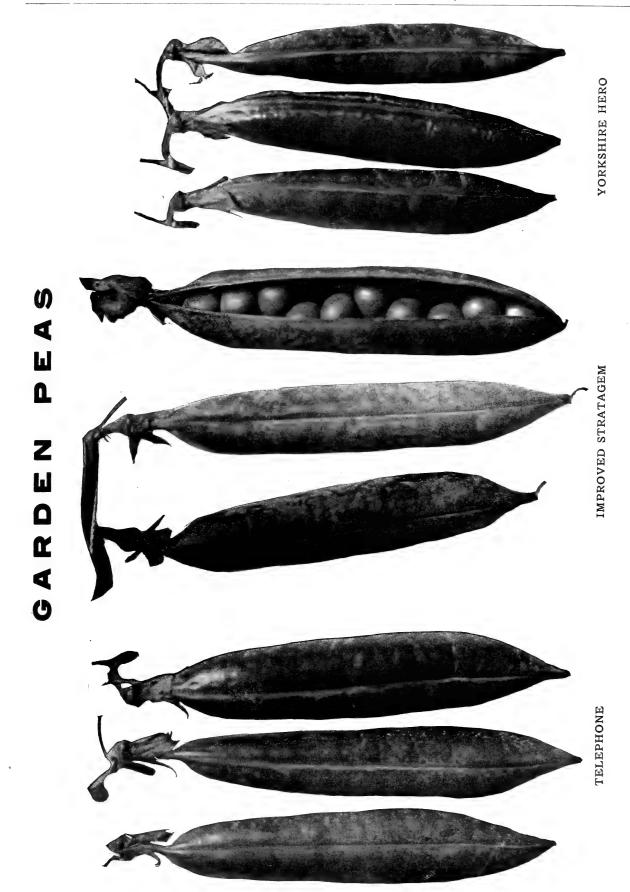
Onion growing for profit depends so much upon good seed that any one engaged in the business cannot afford to take chances on seed they cannot depend upon. For years the finest quality of onions have been produced from our seed, and the best testimonials we can offer is the hundreds of satisfied customers in Michigan, Indiana and Ohio, the greatest onion producing states in the union. Our stock onion bulbs are carefully selected and re-selected, and our crops, for seed, are grown under the greatest care, by men of long experience in onion seed growing. Our field trials have proven beyond a possible doubt that the seed we offer is as good as any to be found anywhere. You may pay more for seed than we ask, but you cannot find better quality. To prove what we claim for our seed, we will be pleased to give any onion grower a free sample for trial. We have harvested the past season the finest crops of seed for twenty years or more. We have a goodly supply and can fill all orders in full quantity. See price list.

True Michigan YELLOW GLOBE ONION





Photograph taken from the product of our Select Seed, crop 1912.

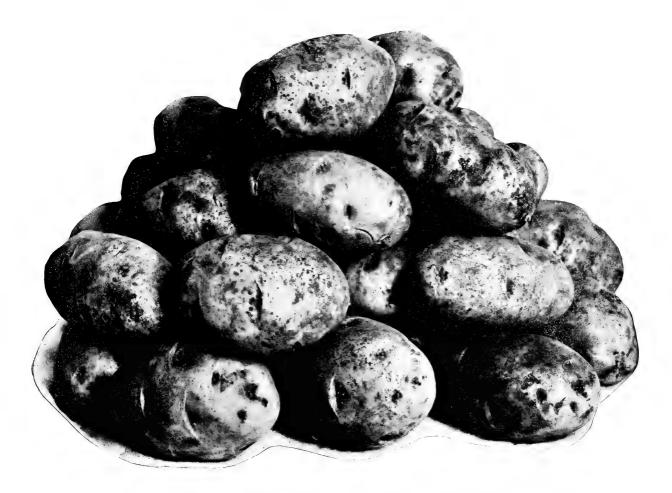




Schell's New Quality Pepper

We are sure you will be interested in this New Pepper. It is without question the most valuable variety ever offered the market gardener. It is tremenduously prolific, the plant photographed contained thirty-eight perfect peppers. It has a beautiful attractive shape, which makes it sell on sight, while its superior quality (Almost as sweet as an apple) backs up it attractive appearance. As to size, it averages five inches in length, three and one-half inches wide at the stem end, and two and three-fourths inches at the other. This New Quality Pepper was originated by Mr. Herman Martin, Harrisburg, Penna., who, with all other gardeners in that vicinity, have been growing it as their best crop for a number of years.

Price, per packet, 15c. Per ounce, 90c; per 1/4 lb., \$3.00.

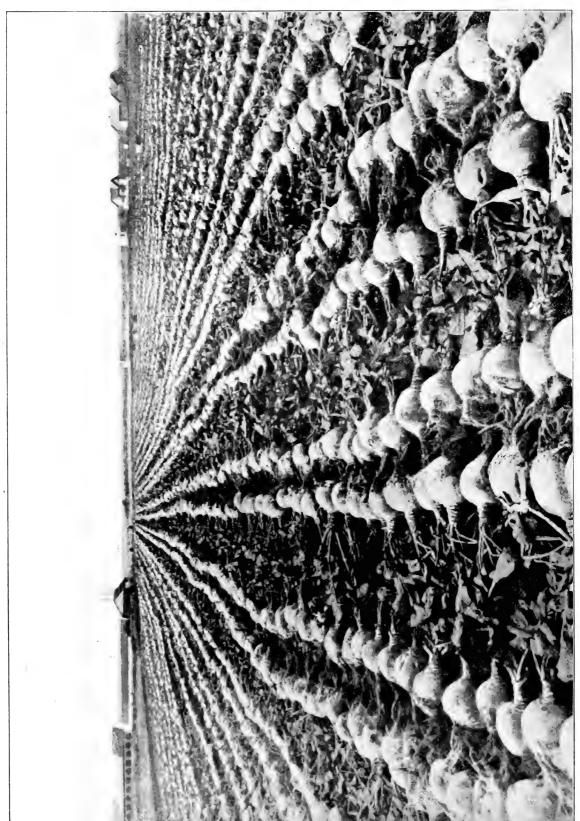


RED RIVER VALLEY EARLY OHIOS

The above illustration represents a true photograph of our "Red River Valley Early Ohio Seed Potatoes," just as they come from the field,—unwashed—and not especially prepared for photographing. The specks or blotches that show on the photograph, are not scabs, but a little of the rich dirt in which they were grown and which still clings to them. The Potatoes we offer have been grown especially for seed purposes from select tubers, and they have been carefully sorted and all potatoes that were prongy, small or scabby were thrown out before the potatoes were stored away for spring planting. They are again carefully sorted in the spring. They are also stored under the most favorable conditions.

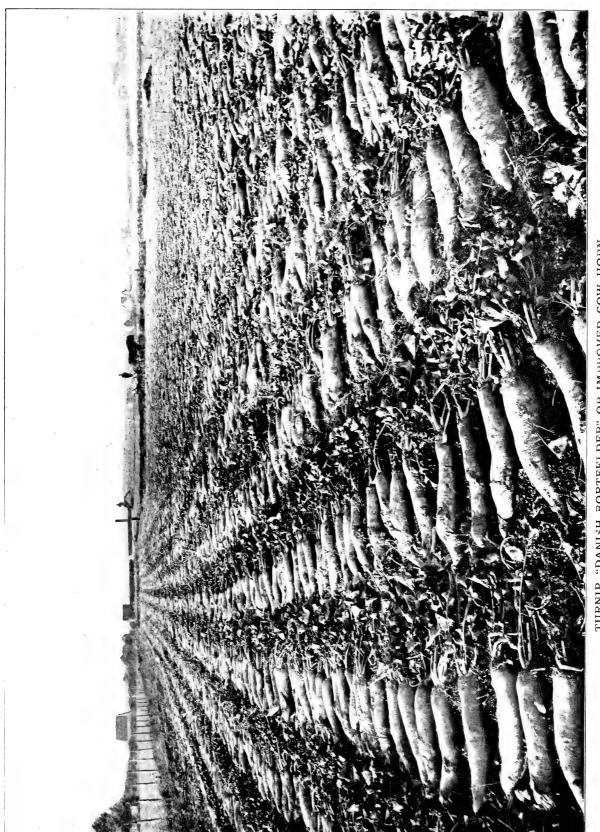
Those who have been growing Early Ohio Potatoes for early market, find that the Red River Valley grown Potatoes are at least ten days to two weeks earlier than the Michigan or the Wisconsin grown stock, and are equally as good as Potatoes grown in the northern part of Maine. As this stock has been carefully selected for many years past, they are a heavier cropper than the common Early Ohios that are offered in the market. It is the most desirable Potato to plant for early market as well as the home garden. On both heavy and light soils it outyields other early sorts and produces a much more uniform lot of tubers.

As we have only a limited quantity of these very fine seed Potatoes, it would be well for you to place your order early and have them shipped when the weather is favorable. The Red River country is situated on the northwestern border of the state of Minnesota, where the conditions for growing Early Seed Potatoes are ideal. Nearly all large Potato growers in the middle west secure their stock seed from the Red River country. Seed Potatoes grown and stored under such ideal conditions are worth double the price of ordinary stock that is grown further south. It would be well for the Michigan farmer to secure some of these select seed Potatoes, if for nothing more than to plant for seed another year, although it would pay him to plant such stock for his general crop of Early Potatoes, regardless of the price we are obliged to ask for this select stock. Any grower who makes a business of growing Early Potatoes for the market, knows what it means to get their crops in ten days to two weeks earlier. Therefore, the price of this seed stock should not be taken into consideration, as the first load or two is apt to bring an advanced price which will more than offset the cost of the seed.



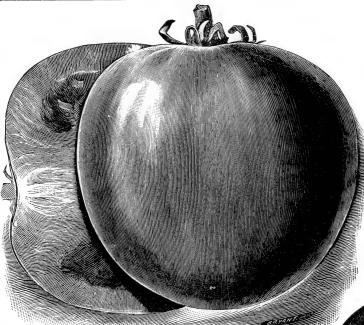
RUTABAGA BANGHOLM.

This Rutabaga is the finest and best of all introductions. The color is yellow, with dark purple head, the shape globular, the form symmetrical. It is a quick grower and a very heavy cropper.



TURNIP, "DANISH BORTFELDER" OR IMPROVED COW HORN.

This splendid turnip has been awarded first premiums by the Danish government. It is the most productive of all turnips and is considered the best in Scandinavia. Long root, cream color, delicate green top, rapid grower, heavy cropper, and excellent keeper. Should be sown in the spring for summer use and in the middle of summer for winter purposes. Especially adapted for Michigan.



LIVINGSTON'S GLOBE.

Hubbard Squash

Hubbard Squash growing, by those who know how, has proven to be a very profitable crop in Michigan. Thousands of tons are shipped from Michigan each year to many parts of the United States. It only requires 3 lbs. of seed to the acre, and therefore a grower should be sure to secure good seed that will produce true types.

CHOICE

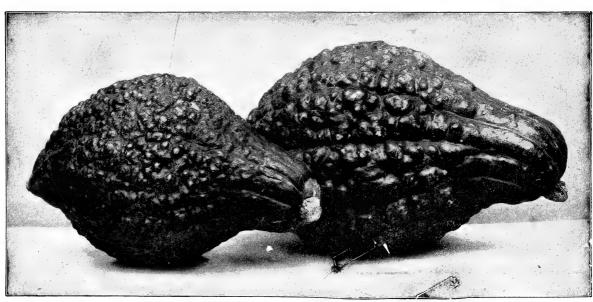
Tomato Seed

When it is known by plant growers that one ounce of good seed will produce 3,000 plants it is very apparent that the best seed should be used. Our seed is grown by Tomato growers of large experience.

Nothing but careful selection of perfect types will insure good results. We supply seed to plant growers in such quantity that produce millions of plants of exceptional fine quality. Take no chances on the tomato seed you sow, get the best regardless of extra cost for good seed.



PERFECTION



THE HUBBARD SQUASH

FLOWER SEEDS

Per	pkt.	Per oz.	Per p	kt. P	er oz.
Abronia, Umbellata		\$.75	Mignonette, Machet	.05	.50
Adonis	.05	.30	Moonflower, Blue	.05	.75
Ageratum, Mixed	.05	.40	Moonflower, White	.05	.75
Alyssum, Sweet	.05	.30	Morning-Glory, Japanese Mixed	.05	.30
Alyssum, Litle Gem	.05	.30	Morning-Glory, Major Mixed	.05	.20
Ammobium, Mexicana Everlasting	.05	.50	Nemophila, Mixed	.05	.30
Antirrhinum, or Snapdragon	.05	.50	Nicotiana, Affnis	.05	.75
Aster, Branching Mixed	.05	.90	Pansy, Giant Mixed	.05	3.00
Aster, Comet Mixed	.05	2.00	Pansy, Mixed	.05	1.00
Aster, Dwarf Chrysanthemum Mixed	.05	2.00	Petunia, Single Mixed	.05	1,00
Aster, German Quilled Mixed	.05	.75	Perilla, Mixed	.05	.20
Aster, Paeony-Flowered Mixed	.05	.2.00	Phlox, Star	.05	.90
Aster, Trufants Mixed	.05	1.75	Phlox, Perennial	.05	.75
Aster, Victoria Mixed	.05	2.00	Phlox, Drummondi	.05	1.00
Aster, White Giant	.05	$\frac{2.00}{2.00}$	Pink, Hardy Garden	.05	.50
Aster, Blue Light	.05 .05	2.00	Pink, Double Chinese Portulaca, Double Mixed	.05	.50
Aster, Blue Dark	.05	2.00	Portulaca, Single Mixed	.05 .05	3.00 1.00
Aster, Pink Dark	.05	2.00	Poppy, Carnation	.05	.30
Aster, Pink and White	.05	2.00	Poppy, California or Escholtzia		.30
Aster, Salmon Rose	.05	2.00	Poppy, Iceland	.05	.75
Balsams, Double Mixed Camellia Flowered		. 1.00	Poppy, Oriental	.05	.70
Balsams, Double Mixed	.05	1.00	Poppy, Paenoy Flowered, Mixed	.05	.30
Balsams, Double Light Lemon	.05	1.00	Poppy, Shirley	.05	.30
Balsams, Double Pink	.05	1.00	Primrose, Chinese	.05	9.00
Balsams, Double Scarlet	.05	1.00	Salpiglosses, Choice Mixed	.05	.60
Balsams, Double White	.05	1.00	Salvia, Drooping Spikes	.05	3.00
Balloon Vine, White	.05	.30	Salvia, Splendens	.05	2.25
Bartonia	.05	.30	Scabiosa, or Morning Bride	.05	.50
Bachelor's Button	.05	.30	Scabiosa Large Flowered Mixed	.05	.50
Bellis, Double Daisy	.05	2.00	Smilax	.05	.75
Butterfly, Flower	.05	.30	Sweet Sultan	.05	.20
Burning Bush, or Kochia	.05	.50	Sunflower, Minature	.05	.40
Carnation, Marguerite	.05	2.00	Sunflower, California Double Mixed	.05	.30
Carnation, Mixed	.05	2.00	Sweet William	.05	.30
Candy Tuft, Mixed	.05	.30	Stock, Choice Mixed	.05	2.50
Canna, Crozy's	.05	.30	Verbena, Mixed	.05	1.00
Castor Beans, Mixed	.05	.30	Verbena, Blue	.05	1.00
Castor Beans, Zanzibar	.05	.50	Verbena, Pink	.05	1.00
Calendula (Pot Marigold)	.05	.30	Verbena, White	.05	1.00
Calliopsis, Mixed	.05	.30	Violet, Sweet	.05	1.50
Canterbury Bell	.05	.40	Wall Flower, Single Mixed	.05	.30
Canary Bird Vine	.05 .05	.40 .75	Wild Cucumber	.05	.30
Clematis Corn Flower	.05	.30	Zinnia, Double Mixed	.05	.40
Cobaea Scandens	.05	1.00	Zinnia, Double Red	.05 .05	.40 .40
Coxcomb, Mixed	.05	.75	Zimita; Double Witte	.00	.40
Collinsia	.05	.30	"GIANT SPENCER SWEET PE	AS"	
Coleus, Mixed	.05	4.00			- 11
Cosmos, Giant Mixed	.05	.50	OZ.	√4 lb.	. Ib.
Cosmos, Ey. Flowering	.05	.50	Black Knight, Spencer, Dk. Maroon \$.40	\$1.25	
Columbine, Double Mixed	.05	.50	Countess Spencer True, Soft Pink 40	1.25	
Chrysanthemum, Double Mixed	.05	.30	Dainty Spencer White with Pink Edge .40	1.25	
Chrysanthemum, Double White	.05	.30	Jaunita Spencer Lavender striped Wht35	1.00	
Coreopsis, Mixed	.05	.50	King Edw. VII Sp. Deep Rosy Carmine .40	1.25	
Cypress Vine	.05	.30	Princess Alice Sp., Vryg Shd. Lavender .40	1.25	
Daisy, Swan River	.05	1.50	Senator Spencer Heliotrope	1.00	
Daisy, Shasta	.05	2.00	White Spencer Finest White	$\frac{1.50}{1.00}$.3.00
Dianthus, Double Mixed		1.00	Spencer Mixed	1.00	. 3.00
Dolichos, Hyacinth Bean	.05	.40	"GRANDIFLORA TYPES SWEET	PEAS'	19
Foxglove, or Digitalis	.05	.90			
Four O'clock	.05	.40 75	Apple Blossom, Crimson Pink with	1/4 lb.	. lb.
For-Get-Me-Not	.05	.75		e 40	\$1.50
Godetia, Mixed	05	.40 .30	Carmine wings	\$.40 .40	\$1.50 1.50
		.30	Blanche Ferry, Pink and White15	.40	1.50
Gourds, Ornamental;	.05 .05	.30	Captain of the Blues, Purplish mauve .15	.40	1.50
Gourds, Nest Egg		.30	Emily Henderson, White	.40	1.50
Gourds, Calabash, Pipe Gourd	.05	.75	Emily Eckford, Best White15	.40	1.50
Gourds, Pear-Shaped	.05	.80	Hon. Mrs. E. Kenyon, Yellow15	.40	1.50
Hollyhock, Double Mixed	.05	1.75	Lady Mary Currie, Dark Purple15	.40	1.50
Hop Vine, Japanese	.05	.50	Maid of Honor, White Edge Lavender .15	.40	1.50
Heliotrope, Mixed	.05	1.00	Modesty, Light Red	.40	1.50
Job's Tears	.05	.10	Navy Blue, Deep Violet Blue	.40	1.50
Larkspur, Double Tall Mixed	.05	.40	Prima Donna, Soft Pink	.40	1.50
Larkspur, Double Dwarf Mixed	.05	.40	Salopian, Dark, Bright Red	.40	1.50
Lantana, Mixed	.05	.40	Sadie Burpee, White	.40	1.50
Linum, Scarlet Flax	.05	.30	White Wonder Many-Flowered White .20	.60	1.75
Lobelia, Mixed	.05	.75	Braslan Mixed	.60	1.75
Love in a Mist, or Nigella	.05	.75	Fancy Mixed	.30	1.00
Marigold, African Mixed	.05	.50	Nasturtium, Tall Mixed	.25	.75
Marigold, French Mixed	.05	.50	Nasturtium, Dwarf, Mixed	.25	.75
Mignonette, Sweet	.05	.30	Nasturtium, Madam Gunther15	.40	1.50

Vick's Aster Novelties for 1913



VICK'S ENCHANTRESS

VICK'S PINK ENCHANTRESS.

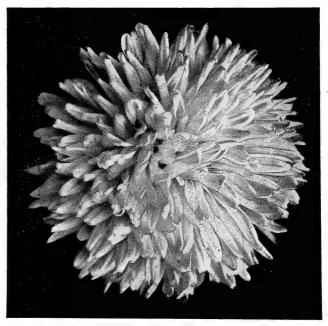
is upright in habit, as distinguished from the branching form. The plant is very vigorous and produces long, strong, graceful stems for the support of numerous large marketable blooms. The flower is always full double; petals are of medium length and very broad. Those towards the center fold in very regularly while gradually, towards the outer edge, the petals stand out more and more until those on the outside recede from the center, thus increasing the diameter of the flower, which compares very favorably in size with the largest flowering kinds.

Per packet, 25 cents, two for 40 cents.

VICK'S PEACH BLOSSOM.

Vick's Late Branching Peach Blossom is a decided and pleasing shade of deep lavender pink. The flowers are of the largest branching size and very deep, having an unusual number of rather narrow petals. The size and thickness of the flower gives it a massive effect. The plants are of the non-lateral type, with very strong stems that hold the flowers up at all times. Florists and amateurs predict that it will become a standard as soon as stock is available.

Per packet, 25 cents, two for 40 cents.



VICK'S PEACH BLOSSOM

Vick's Aster Novelties for 1913



VICK'S WHITE KING

VICK'S WHITE KING

and Vick's Lavender-Pink King bloom with the Late Branching, and have all the vigor of that famous class of Asters. Plants, however, are upright in growth, differing in this respect from Violet King and Rose King. Stems are long, and very free from side shoots. In the field this summer there were any number of plants with flower stems from 14 to 20 inches long.

VICK'S LAVENDER-PINK KING

is similar to Vick's White King in type of plant and flower, differing only in color which is a beautiful lavender-pink, very much like the famous Rochester Aster.

Per packet, 25 cents, two for 40 cents.

VICK'S WHITE PERFECTION

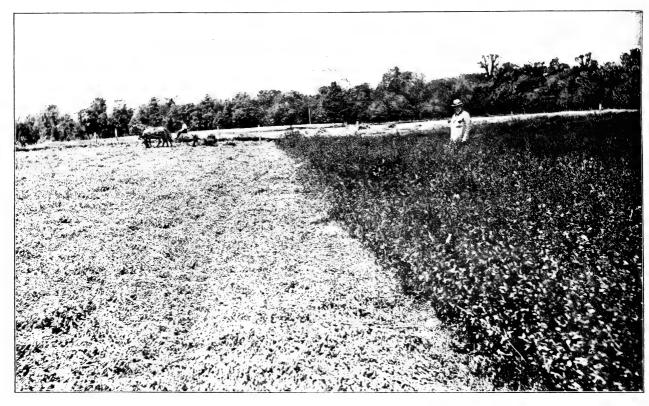
is the finest midseason white Aster in cultivation. The flowers are four inches in diameter and exquisite in form, and the plants are taller than those of the late upright Asters. When first opened the entire flower is strongly whorled producing a charming effect. The broad petals are slightly folded lengthwise, making them appear rather narrow. In mature flowers, the outer rows are straight, but the center still retains its characteristic strong whorl. The plants are extremely vigorous. They carry about twelve large flowers on long stems free from side branches.

Per packet, 25 cents, two for 40 cents.



VICK'S WHITE PERFECTION

ALFALFA VIEWS



Photograph views taken on Mr. L. J. Rindge, Annadale Farm in Wyoming township, Kent County. These photos were taken the latter part of last June, when the Alfalfa was in full bloom. One can judge its dense growth by the figure taken in the photograph. Alfalfa is now recognized by all dairymen as being the most valuable crop on the farm.





This is a photograph of the third crop, cut the latter part of September, showing a growth of 2 feet or more. The land on which this alfalfa was grown is a gravelly soil within ten miles of Grand Rapids. The first cutting was the latter part

of May; the second in July.

cess land must be thoroughly cultivated and free from weeds. Soil or clay loam should be plowed and cultivated deep, while light, sandy soil should have shallow cultivation so as to secure a compact, firm seed bed.

SUITABLE SOIL—Sandy or gravelly soil with a perous sub-soil which will permit the penetration of the root is considered generally to be the most sutable soil for Alfalfa. Avoid low, cold, wet lands; also high, wet lands such as seepy hillsides. An impenetrable hard-pan sub-soil is very undesirable.

TIME OF SEEDING—May and June seeding seem to give the best general results, although successful seeding in July, even up to August 1st, has been accomplished. Sow from 15 to 20 pounds to the acre broadcast, followed by very light discing or harrowing, or both, as the conditions may demand, on well prepared loam soil. On light, sandy soil, which is apt to drift or dry out quickly, the seed sowed should be imbedded to a greater depth.

QUALITY OF SEED—We most strongly urge the sowing of Northern grown American seed of the best quality obtainable. It costs a little more to seed per acre but it is worth much more.

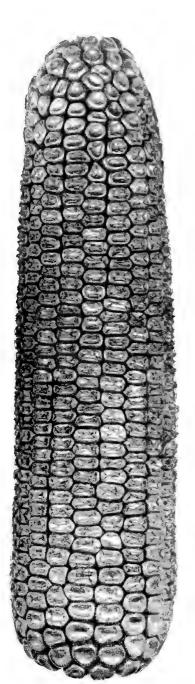
We do not favor a nurse crop, but if a nurse crop is used do not sow but one-half to two-thirds as much seed. For further information ask for our little booklet on Alfalfa.

GOOD SEED CORN

The successful Corn Grower knows full well the great importance of planting GOOD SEED. Corn of low vitality or illbred should never be planted.

It is only seed corn that will show a strong growth of 90% or better that is really fit for seed purposes. When one stops to figure that there is an actual loss of from 25 to $33\frac{1}{3}\%$ per hill by planting seed of low vitality it will be apparent that it pays to plant good Corn and nothing else. It is also necessary to plant such Corn that is adapted to the climate and which will be sure to mature in a normal season. One can better

afford to pay more for good Seed Corn that he can depend upon than to plant something of questionable character. It is not an uncommon thing for a farmer to select some of the best ears from his crib and take a chance at it without knowing whether the Corn will grow. It would pay him much better to feed such Corn and secure Corn that has been well grown and bred especially for seed purposes.



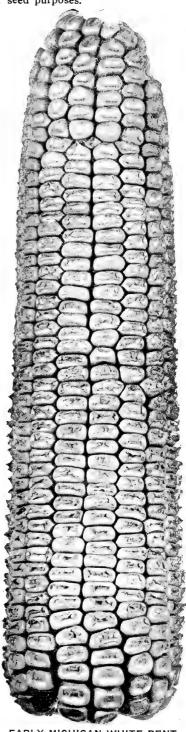
PICKET YELLOW DENT

The Picket Yellow Dent is a great favorite with farmers in Central Michigan. Our seed of this splendid variety is grown in Kent County.



QUEEN OF THE NORTH or IMPROVED PONY DENT

The Queen of the North or Improved Pony Dent is an old time favorite all over the State. It will mature as far north as any Yellow Dent variety. Our supply of this variety is of extra strong vitality and in a normal season will mature in 85 days.



EARLY MICHIGAN WHITE DENT

Michigan White Dent is growing in favor and being grown in Kent County. It fills all the requirements of a White Dent variety for this locality.



RED COB ENSILAGE CORN.

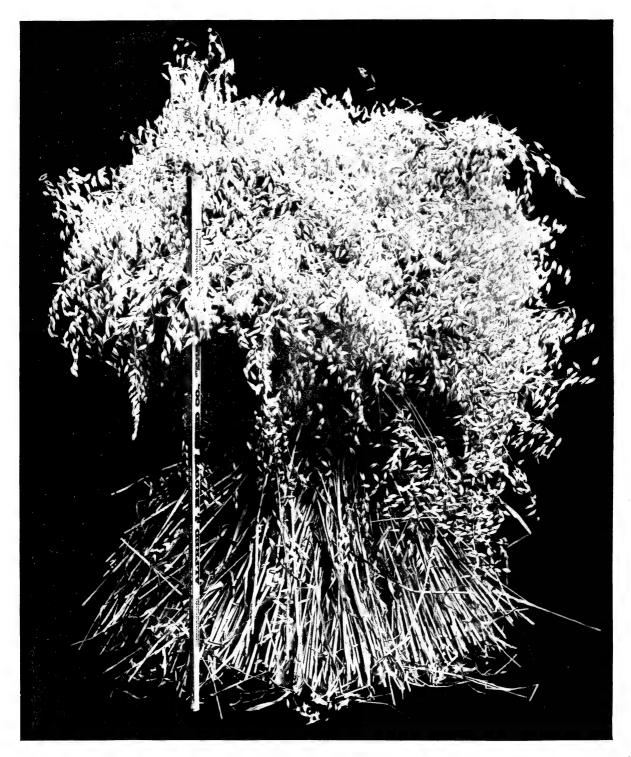


Our genuine Red Cob Ensilage corn is far superior to common Red Cob Fodder corn. It will produce considerable more tons of green fodder to the acre. None genuine unless it has the trade mark stenciled on the bags. It was about 15 years ago when we first introduced the corn to the dairymen and farmers of Western Michigan. Since then the demand has gradually increased.

One bushel of this corn has been known to produce fifty tons of green fodder to the acre.

Crimson or Scarlet Clover

Crimson Clover is an annual and is grown largely in the Southern and Southeastern states. Ten or fifteen years ago, it was introduced to the Michigan farmer, and while it is not grown extensively in this state, it has met with considerable favor. Seed should be sown at the rate of fifteen lbs. to the acre, and may be sown among corn at the last cultivation and it will produce good fall pasturage. As the plant gathers nitrogen, a crop turned under makes a very valuable fertilizer.



TRUE SWEDISH OAT

True Swedish Oat "regenerated" and unquestionably the best Oat for the Michigan Farmer. Ripens early on a good stiff straw and out yields all other oats.

SWEET CLOVER

Sweet Clover seems to be coming to its own, and seed is said this season to be quite scarce. Aside from its value as a soil renewer, after the manner of Clovers, and as a bee pasture the plant itself, long classed among the noxious weeds, is now recommended as a weed eradicator.

"Its value to the farmer as a noxious weed eradicator deserves mention," says a writer in the Country Gentleman. "During June I sowed ten pounds of Sweet Clover seed on a plat of ground of about an acre and a half which contained Canada thistles. The plat was not plowed, the seed being sown simply on the sod. In due time the plant appeared and grew luxuriantly in spite of drouth, which overtook it. It has been left standing and allowed to reseed itself annually until now it has become an impenetrable mass, having attained a height of from seven to nine feet on an aver-

age. This luxuriant growth has almost entirely choked out every Canadian thistle and other weeds. I think farmers would do well if they would make use of their waste places and fence-rows which are infested with weeds to sow Sweet Clover and allow it to reseed itself and choke out the weeds. It might just as well be growing in waste places and fence-rows as weeds, and it would supply the bees with abundant pasture. It might be objected to and termed a weed, but if it is, it is a very valuable one."

I am satisfied that Sweet Clover Seed will be in demand in a few years and the seed dealers will be compelled to carry it in stock, owing to the increased acreage and its popularity as a valuable plant of many uses to the farmer, stockman and bee keeper. In classing Sweet Clover I think it takes second place to Alfalfa with the other Clovers following.

FIELD PEAS

FOR DAIRY COWS AND HOGS.

Equal To Corn and Six Weeks Earlier.

Can be sown separately in drill, or broadcast, 2 to $2\frac{1}{2}$ bushels to the acre, or with oats $1\frac{1}{2}$ bushels to the acre.

The Field Pea does not succeed in the hot climate of the Southern States, but does well in the North, and on any soils adapted to oats or spring wheat.

Cut and fed green, or, if for hogs alone, can be used as pasture.

They have been grown by dairymen with very sat-

isfactory results, following winter rye, which was cut green in June for dairy cows, then stubble turned under and sown to mixed peas and oats, furnishing a large amount of forage in August, when grass pasture is usually short, and producing a supply of milk as abundant as in early summer months.

As a fertilizer they come next to clover, to be plowed under when they commence to blossom. They will grow on land that will not produce clover.

DWARF ESSEX RAPE

This plant is extensively grown for forage, especially for sheep and for green manure, for which purpose there is perhaps no better plant adapted where a quick, rank growth is desired. Farmers who raise much stock and desire to get young cattle, sheep and lambs



into favorable condition to be sold advantageously in the fall, can do it most cheaply by growing this Rape. Prepare the ground as for turnips and sow in June or July, with a turnip drill, in rows $2\frac{1}{2}$ feet apart, at the rate of 3 pounds of seed per acre, or broadcast at the rate of 6 pounds to the acre.

SOIL REQUIREMENTS—For its best development rape requires a rich, moist, loamy soil and will usually do well on any but light sandy soils and stiff clays, such soils being usually deficient in vegetable matter. In general, a soil that will produce good crops of turnips, cabbages, wheat and corn will be suitable for rape.

EXTENT OF CULTIVATION—Rape is best adapted to rather cool moist climates, such as prevail in portions of Canada and the Northern United States. It can, however, be successfully grown as a forage crop in many of the warmer and drier sections. In the South it may be grown as a fall or winter forage. In favorable seasons, or with a small amount of irrigation, excellent crops of rape are grown in Wyoming, Montana, the Dakotas and Michigan, and many instances are on record where good crops have been produced without irrigation, under conditions of drought so severe as to cause the failure of corn and other farm crops.



HAIRY VETCH AND RYE GROWING TOGETHER

Hairy or Winter Vetch

Also Known as

SAND VETCH.

HISTORY AND DESCRIPTION.

This valuable legume is a native of Western Asia, and was introduced in 1874. It is cultivated extensively in Germany, Russia and France. It is known in Germany as "Sand Zottel" or "Winterwicke." The plant is a branching climbing vine, many of its branches attaining a length of from 8 to 10 feet. The blossoms are a beautiful bluish purple, growing in clusters, and the plant as well as the seed resemble sweet peas. Not until recent years has the Department of Agriculture at Washington, D. C., called attention to the great value of this plant, and it is surprising the recognition it received from the farmers and fruit growers in Michigan.

CULTIVATION

If sown in early spring and conditions are favorable, the plant will develop rapidly and will be in full bloom by the middle of August and will continue to grow and remain green until the ground freezes in the winter.

To grow for a crop of seed, early fall sowing is most desirable, say any time from the middle of July until the middle of September. When sown in the fall, the plant will make some growth before winter sets in, but the following spring a marvelous growth will develop and the crop will be in full bloom early in June, ripening seed by the middle or latter part of July.

Hairy Vetch is especially adapted for poor, light, sandy soil and can be grown successfully either for feeding or for plowing under as a fertilizer. If grown on good potato or corn land, it develops a tremenous crop. If sown in the fall, the following summer the first crop of green feed can be cut about the first of June, and, if not cut too close, as many as three crops can be cut in one season.

Sow in July or August, and As a cover crop for orchards, the Vetch is rapidly growing in favor. if the weather is favorable, a very satisfactory crop will be obtained to mulch the soil when winter sets in.

QUANTITY OF SEED REQUIRED PER ACRE.

Hairy Vetch is usually sown with rye or oats and 40 lbs. of seed is required to the acre. If sown in the spring, sow with oats. If in the fall, sow with rye.

SPRING VETCH.

Spring Vetch is an annual and should always be sown in the spring with small grain at the rate of 60 pounds of seed to the acre. The seeds of Spring Vetch are somewhat SEEDS OF SPRING flattened and grayish in color and larger than seeds of Hairy Vetch, which are more round in shape and black. (See illustrations showing size and shape.) Common or spring vetch requires fairly good soil to succeed, while Hairy Vetch is less particular and grows well in poor soil, especially sandy land. Spring Vetch will not grow in alkali soil nor is it drought resistant, while Hairy Vetch will stand considerable alkali and much drought.

Vetches should not, as a rule, be sown in rotation with 👩 🏾 wheat, as they tend to volunteer and the seed is very difficult to separate from wheat. If grown in rotation with wheat they should not be allowed to mature seed, but where this SEEDS OF HAIRY is done they should be followed by a cultivated crop before wheat is again planted.



VETCH NATURAL SIZE.



NATURAL SIZE.



A SINGLE PLANT OF H OR WINTER VETCH

COW PEAS

A valuable and nutritious Green Forage or Hay Crop. Enriches poor land; improves good land.

One of the best and most economical ways of improving the soil is the plowing under of a leguminous crop. COW PEAS have been found superior for this purpose, making one of the largest yielding and most



COW PEA PLANT-SHOWING RIPE PODS

nutritious crops known, while as a soil improver they are invaluable. They will grow on any soil that is not wet or cold, and especially on soils medium or light.

Like Clover, they absorb Nitrogen from the atmosphere, and the roots, reaching deep into the soil, bring up the necessary Potash, thus making a complete and

natural fertilizer. The COW PEA has power greater than any other legume to extract the nitrogen or ammonia from the atmosphere and store same in the vines and roots, so that even if the crop is cut off, the land is enriched and improved by the roots. From 5 to 9 tons of green fodder to the acre have been produced. There are about fifty known varieties of Cow Peas. but only a few extensively culitvated. The use to be made of the crop by the grower should determinate largely which variety to select. For forage purposes the most desirable are those which have a fairly upright habit of growth, grow to a large size, hold their leaves well and produce an abundance of pods.

The Whippoorwill variety is perhaps the most widely cultivated, and it may be considered the standard of all Cow Peas. It is suitable for hay or grain production. It makes a vigorous growth, is fairly erect and still produces a large amount of vine. The seed is mottled chocolate on a buff or reddish ground color.

The Early Michigan, or Michigan Favorite is perhaps the best variety for producing seed and in some sections of the state it is cultivated altogether.

The New Era is the smallest seeded of all the Cow Peas that have found a wide use. The seed is bluish in color. The plant is the most erect of all Cow Peas, rarely having any prostrate branches. It is early and produces a large crop of seed.

For hay sow from one to one and onehalf bushels to the acre. For seed, sow one-half to three-fourths bushels to the acre.

SOJA OR SOY BEAN

The Soja Beans are fast taking the place of clover in sections where the soil is not the most fertile both for hay and fertilzing purposes. Recommended as one of the best leguminous plants for soil restoring, as it is adapted to all soils. It is a sure cropper. Unsurpassed for hay, claimed to be superior to clover or timothy. Ordinary yield of beans 25 to 40 bushels per acre. They are one of the richest of natural stock foods. Plant in May, for it takes about 90 days to mature the seed. For hay, sow about 1 bushel per acre, either broadcast or drilled. Cut when in blossom. For seed, sow in drills about 12 inches apart in the

rows and have the rows about 30 inches apart. For seed sow from 8 quarts to a half bushel.

The Southern Yellow Soy or Soja Bean is grown in Michigan to some extent, but it is grown for fodder and hay purposes exclusively. The season not being long enough to mature the crop.

The best varieties for Michigan are the Black Beauty and the Nuttall. The seed of the Black Beauty being so small requires only eight quarts of seed to the acre. Nuttall closely resemble the Black Beauty. Both varieties will mature seed in Central Michigan, and we can most highly recommend these varieties.

Vegetable Price List

ASPARAGUUS	SUGAR BEET FOR STOCK FEEDING
Oz. $\frac{1}{4}$ Lb. Ib.	Lb.
Columbian Mammoth White\$0.05 \$0.15 \$0.50	Giant Half Sugar Feeding, Rose\$0.40
Conover's Colossal	Giant Half Sugar Feeding, White
ASPARAGUS ROOTS	New Danish Sludstrup
One Year Old, per 100	
Two Year Old, per 100	MANGEL WURZEL Mammoth Long Red, Imp'd:\$0.40
	Yellow Globe
BEANS, DWARF WAX SORTS	Golden Tankard
Qt. Pk. Bu. Davis Kidney Wax	Red Globe
Wardwells Kidney Wax	CABBAGE Oz. 1/4 Lb. Lb.
Dwarf Golden Wax	Copenhagen Market\$0.50 \$1.25 \$4.50
German Black Wax	Early Jersey Wakefield20 .60 2.00
Pencil Pod Black Wax25 1.40 5.00	Large Wakefield Charleston 20 60 2.00
Currie's Rust Proof	Early Winningstadt
Improved Golden Wax .25 1.40 5.00 Michigan White Wax .25 1.40 5.00	Henderson's Early Summer20 .60 2.00 Fottler's Imp. Brunswick20 .50 1.75
	Fottler's Imp. Brunswick
BEANS, DWARF GREEN PODDED	Henderson's Succession
Burpee's Stringless Green Pod. \$0.25 \$1.40 \$5.00	Early Flat Dutch
Extra Early Red Valentine	Premium Flat Dutch15 .50 1.75
Refugee or Thousand To One25 1.25 4.50	Large Late Drumhead15 .50 1.75
Dwarf Horticultural	Surehead
Black Valentine	Danish Ball Head, Long Stem .25 .75 2.50 Danish Ball Head, Medium25 .75 2.50
Giant Stringless	Danish Ball Head, Medium25 .75 2.50 Hollander Finest Imported20 .60 2.00
Longfellow	Mammoth Rock Red
Royal White Dwarf Kidney	
Large White Marrow	TABLE CARROT
Improved Pea or Navy 20 .90 3.25	Oz. ½ Lb. Lb. Early Short Horn or Forcing10 .30 1.00
,	Early Short Horn or Forcing10 .30 1.00 Early Scarlet Horn10 .30 1.00
LIMA BEANS Burpee's Bush Lima	Danver's Half Long10 .30 .90
Burpee's Improved Lima	Chantenay Stump Rooted10 .30 1.00
Henderson's Bush Lima 30 1.75 6.50	Guerrande or Oxhart 10 .30 .90
King of the Garden	Nantes, Half Long
Sieberts or Jersey	Long Orange10 .30 .90 Giant White Belgium10 .25 .75
POLE BEANS	Giant White Belgium .10 .25 .75 Orange Belgium .10 .25 .75
London Horticultural25 \$1.60 \$6.00	Improved Short White10 .25 .75
Dutch Case Knife	
Kentucky Wonder25 1.60 6.00	TRUE SNOW BALL CAULIFLOWER
White Crease Back	Price per Oz., \$1.50; ½ Lb., \$6.00; Lb., \$18.00.
TABLE BEET	CELERY Oz. $\frac{1}{4}$ Lb. Lb.
Oz. ½ Lb. Lb.	Golden Self-Blanching French
Fire Balls	Grown
Crosby's Early Egyptian	Golden Self-Blanching .25 .90 3.00 White Plume .20 .60 2.00
Eclipse	White Plume
Early Blood Turnip	mazoo
Crimson Globe	Dwarf Golden Heart
Edmonds Blood Turnip 10 .25 .85	Celeriac or Turnip Rooted15 .40 1.40
Detroit Dark Red Turnip	Celery Seed for Flavoring05 .15 .40
Long Dark Blood	Celery, Soup or Cutting10 .25 .90
Swiss Chard	CRESS $Oz. \frac{1}{4}$ Lb. Lb.
SUGAR BEET FOR SUGAR MAKING	Curled or Pepper Grass\$0.05 \$0.15 \$0.40
Lb.	CORN SALAD
Klien Wanzleben\$0.35	Oz. $\frac{1}{4}$ Lb. Lb.
Vilmorin's Improved	Large Seeded\$0.10 \$0.20 \$0.60

TIDI NDD J.	2110 111	OLLL			
SWEET CORN			LETTUCE Oz.	½ Lb. 1	Lb.
Qt	. Pk.	Bu.	Premium Cabbage\$0.10		0.90
Mammoth White Cory\$0.20		\$3.50	Early Curled Silesia	.25	.80
White Cob Cory		3.50	Hanson	.25	.90
Early Minnesota	1.00	3.50	Grand Rapids Forcing15	.3 0	1.00
Crosby's Early		3.50	Grand Rapids Forcing "Select" .20		2.00
Perry's Hybrid		3.50	Early Tennis Ball	.25	.90
Black Mexican	1.00	3.50	Early Curled Simpson10	.25	+80
Early Evergreen	1.00	3.50	Black Seeded Simpson10	.25	.80°
Stowell's Evergreen	.90	3.25	Prize Head	.25	.90
Country Gentlemen		3.50	California Cream Buter10	.25	.90
Golden Bantum		4.50	Big Boston	.25	·90
Moor's Concord		3.50	May King		1.00
Burpee's White Evergreen20		3.50	Early White Cabbage	.25	.80
Peep O' Day		4.50	Brown Dutch	.25	.80
Adams' Early		3.25			
	,,,,	0.20	MUSHROOMS	Lb. 10 I	
CUCUMBER			Garden City, Pure Culture	.\$0.15 \$:	1.25
Oz.	1/4 Lb.	Lb.	MUSK MELONS		
Davis Perfect\$0.10	\$0.25	\$0.80	Oz.	1/4 Lb.	Lb.
Davis Perfect "Select"25		2.50	Paul Rose		0.85
Early Frame or Short Green10		.60	Rocky Ford	.25	.80
Early Green Cluster10		.60	Osage	•25	.90
Arlington White Spine10		.60	Vaughan's Osage "Select"20		2.50
Improved White Spine 10		.60	Netted Gem	.25	.75
Klondyke Long White Spine10		.60	Hoodoo	.25	.80
Evergreen White Spine10		.60	Large Green Nutmeg10	.25	.90
Chicago Pickling		.60	Montreal Nutmeg		1.00
Boston Pickling		.60	Emerald Gem		1.00
Improved Long Green10		.80	Grand Rapids Early Market10	.25	.90
Small Gherkin "For Pickles"15		1.25	Tip Top	.30	.85
Cool and Crisp		.70	Bay View	.25	.75
Everbearing		.70			
EGG PLANT			WATER MELONS Oz. Sweetheart\$0.05	/.T	Lb.
Oz.	1/ Th	T L	Vick's Early05	\$0.15 \$0 •15	0.50
Improved New York Purple \$0.30	1/4 Lb. \$1.00	Lb. \$3.50	Mountain Sweet	.15	.50 .50
	ΨΣ•ΟΟ	ψ3.50	Phinney's Early	.15	.50
ENDIVE Oz.	$\frac{1}{4}$ Lb.	Lb.	Cuban Queen	.15	.50
Moss Curled	\$0.30	\$1.00	Kolb Gem	.15	.50
Green Curled	.30	1.00	Peerless	.15	.50
SWEET HERBS	0~	Lb.	Round Light Icing	.15	.50
Anise Anise	Oz.	\$0.80	Dark Icing	.15	.50
		1.25	Georgia Rattlesnake	.15	.50
Basil, Sweet	10		Citron (For Preserves)05	.15	.50
Caraway, For Sowing	•10	.50	Kleckley's Sweet	.15	.50
Dill	10	.60	Dixie	.15	.50
Fennel, Sweet	10	.60			
Horehound Lavender		1.75 1.50	ONION SEED Oz.	/ <u>-</u>	Lb.
Majoram, Sweet	15	1.25	Extra Early Flat Red\$0.10		1.00
Rasamany	25	2.75	Large Red Wethersfield10		1.00
Rosemary			Southport Red Globe (Select)10		1.25
Rue		2.75 1.10	Yellow Globe Danvers (Select) .10		1.25
Sage, Broadleaf	10	2.25	Michigan Yellow Globe10		1.25
Savory, Summer	+20		Yellow Strasburg		1.00
Thyme, English	35	3.75	Yellow Danvers Flat		1.00
KALE OR BORECOL	E		Southport Yellow Globe10		1.25
Oz.	1/4 Lb.	Lb.	Mammoth Prize Taker 10		1.25
Tall Green Curled Scotch\$0.10			White Globe Southport 20		2.00
Dwarf Curled Scotch or Ger-	•	•	White Portugal or Silverskin15		1.50
man Greens 10.	.20	.50	Early White Queen		1.50
			Mammoth Silver King 15		1.50
KOHL RABI Oz.	1/4 Lb.		White Barletta	.40	1.50
Early White Vienna\$0.20		\$1.75	ONION SETS		
Purple Vienna	.50	1.75	Choice White)		
LEEK Oz.	1/4 Lb.	Lb.	Choice Reds Market Price. As	k for Price	es.
American Flag\$0.15	\$0.50	\$1.75	Choice Yellows .)		

PEAS, EARLY SORTS			RHUBARB	
Qt.	Pk.	Bu.	VictoriaPer Lb.	\$1.00
Extra Early\$0.25	\$1.60	\$6.00	Rhubarb Roots Each	10
First and Best	1.60	6.00	SALSIFY	
Alaska	1.50	5.50		b. Lb.
American Wonder	1.75	6.50	Mammoth Sandwich Island\$0.10 \$0.30	
Nott's Excelsior	1.75	6.50	Mammoth Bandwich Island 40.70 40.50	, ψ,,οο
Sutton's Excelsior	1.75	6.50	SPINACH	
Gradus	2.25	8.00	Oz. $\frac{1}{4}$ L	b. Lb.
Thomas Laxton	2.25	8.00	Thick Leaf Summer\$0.05 \$0.10	\$0.15
McLean's Little Gem	1.75	6.50	Victoria Long Standing05	
Premium Gem	1.75	6.50	Bloomsdale	.15
DEAC WALKI ODOD COD	ALC:		SQUASH, SUMMER VARIETIES	
PEAS, MAIN CROP SOR		_	Oz. 1/4 L	
Qt.	Pk.	Bu.	Mammoth White Bush \$0.10 \$0.20	
Telephone	\$1.75	\$6.50	White Sumer Crookneck 10	-
Alderman	1.75	6.50	Early Yellow Bush Scallop10 .20	
Yorkshire Hero	1.60	6.00	Early White Bush Scallop10 .20	
Stratagem	1.60	6.00	Yellow Summer Crookneck10 .20	
Everbearing	1.60	6.00		
Champion of England25	1.75	6.00	SQUASH, WINTER VARIETIES	
Horsford	1.60	6.00	Oz. 1/4 L	b. Lb.
McLean's Advancer25	1.60	6.00	Hubbard, True Select\$0.10 \$0.29	\$0.70
Marrowfat	1.30	4.00	Chicago Warty Hubbard10 .29	.80
PARSNIP			Golden Hubbard	.80
Oz.	1/4 Lb.	Th	Boston Marrow	.60
Improved Hollow Crown\$0.10	\$0.20		TOTA 4 TO	
- ·	ψ0.20	φοισσ	TOMATO Livingston Globe\$0.25 \$0.75	\$2.50
PARSLEY		•	• •	
Champion Moss Curled\$0.10	\$0.25	\$0.80	Earliana .25 .79 Favorite .15 .50	
1	•	•		
PEPPER			Beauty	
Large Bell or Bull Nose20	.50	1.50	Early Acme	
Long Red Cayenne	.60	2.00	Perfection	
Chinese Giant	1.00	3.50	Stone	
Red Chili	.60	2.00	Chalk's Early Jewell	
PUMPKIN				
Large Cheese\$0.05	\$0.15	\$0.40		
Sugar	.15	.40		
King of the Mammoths 10	.25	.75		
Connecticut Field	.10	.25	Plum Shape	2.50
Japanese Pie	.25	.80	TURNIP, WHITE FLESHED SOR	ľS
RADISH			Early White Flat Dutch Strap	
	\$0.20	\$0.40	Leaf\$0.05 \$0.15	5 \$0.40
Vick's Scarlet Globe\$0.05		\$0.60	Extra Early Purple Top Milan .10 .20	
Half Long Bright Scarlet05	.15	.45	White Egg	
Scarlet Turnip White Tip 05	.15	.40 50	Early Purple Top Strap Leaf05 .19	
Scarlet Turnip White Tip05	•15	.50	Purple Top White Globe05	
Rosy Gem White Tip05	.15	.50	Long White Cow Horn05	
Cooper's Sparkler	.20	.60 .40	Sweet German	
Early Round Dark Red05	.15		Pomeranean White Globe05	
Long Scarlet Short Top05	.15	.40	White Norfolk	
Wood's Early Frame05	.15	.40	Danish Bortfelder or Improved	, ,-,
French Breakfast	.15	.40	Cow Horn	.50
Beckert's Chartier	15	.40		
Philadelphia White Box05	.15	.45	TURNIP, YELLOW FLESHED SOR	
White Strasburg	.15 .15	.45 .45	Green Top Yellow Aberdeen \$0.05 \$0.15	\$0.40
			Yellow Globe	
Icicle	.15	.50	Robertson's Golden Ball05 .15	.40
Chinese Rose or Scarlet China05 Long Black Spanish05	.15	.50		
	.15	.50 .45	RUTABAGA OR SWEDES	¢0.25
	.15 .15	.45 .50	American Purple Top\$0.05 \$0.15	
		.50 .50	White Sweet Russian05 .15	
Giant White Stuttgart	.15 .15	.50	Monarch Tankard	
Cantornia with manimoni	.,,	+50	New Danish Dangholm05 .15	.50

FARM SEEDS

CLOVERS Per Lb. Per Bu. Medium or June \$0.30 Market price Mammoth .30 " Alsyke .30 " Alfalfa .25 " Crimson .20 " White Dutch .50 " Sweet Clover .25 "	FIELD AND COW PEAS Per Bu. Canada Field \$2.50 Cow Peas, Mixed 3.00 Cow Peas, New Era 3.50 Cow Peas, Whippoorwill 3.25 Michigan Favorite 3.25 SOJA BEANS Per Bu.
GRASS SEEDS Per Lb. Per Bu. Timothy\$0.10 Market price	Southern Yellow \$3.00 Northern Grown Nuttall 3.50 Northern Grown Black Beauty 3.50
Kentucky Blue Grass .25 " Orchard Grass .25 " Perennial Rye Grass .15 " Red Top Fancy .25 " Red Top Unhulled .15 " Creeping Bent Grass .40 " R. I. Bent Grass .40 " Wood Meadow Grass .50 " LAWN GRASS Fancy Mixed, 1-Lb. Pkg. \$0.30 Fancy Mixed, 3-Lb. Pkg. .75 Fancy Mixed, 10 Lbs. or more, per Lb. .22	SEED CORN Per Bu. Michigan Yellow Dent \$1.75 Michigan White Dent 2.00 Pride of the North 2.00 Picket Yellow Dent 2.25 Improved Pony Dent 2.00 Early Huron 2.00 White Cap Yellow Dent 2.00 Wisconsin White Dent 2.00 Longfellow Flint 2.25 Compton's Early Flint 2.25 Sanford's White Flint 2.25 Smut Nose 2.50
SEED GRAIN Per Bu. Barley, Fancy Two Rowed \$1.75 Barley, Six Rowed 1.50 Buckwheat, Silver Hull 1.25 Buckwheat, Japanese 1.25 Spring Rye 1.50 Swedish Oats, Regenerated .90 Speltz 1.00	FODDER CORN Per Bu.
MILLETS Per Bu. Southern German Market price Western German " Common " Siberian " Japanese " Hungarian " Market price " " " " " " " " " " " " " " " " " " "	MISCELLANEOUS SEEDS Per Bu. Dwarf Essex Rape \$0.10 Spring Vetch .06 Winter Vetch .12 Amber Cane .04 (4 Lbs. Bird Seed for 25c.)

PRICES SUBJECT TO MARKET CHANGES

Seeds in Quantity

Those desiring vegetable or field seeds in quantity should ask for special prices. We grow and handle large quantities of the following seeds and shall be pleased to submit our prices with samples for test if desired.

VEGETABLE SEEDS

Peas and Beans
Beet and Mangel
Danish Ball Head Cabbage
Stock and Table Carrots
Cucumber for Pickles
Onion Seed
Onion Sets
Hubbard Squash
Turnip and Rutabaga

FARM SEEDS

Clover
Alfalfa
Timothy
Grass Seeds
Seed Grain
Cow Peas and Soja Beans
Dwarf Essex Rape
Seed and Fodder Corn
Winter Vetch

(Ask for special prices, naming quantity you wish to buy.)

Quantity of Seeds required to plant an acre or a given amount of ground.

Per acre	Per acre
Alfalfa	Per acre

Number of Plants or Trees to the Acre at given distances.

Dis. apart No. Plants	Dis. apart No. Plants	Dis. apart No. Plants	Dis. apart No. Plants
½ foot174,240	3 feet by 3 feet 4,840		12 feet 302
1 foot 43,560	4 feet by 1 foot 10,888	7 feet 889	15 feet 193
1½ feet 19,360	4 feet by 2 feet 5,444	8 feet 680	18 feet 134
2 feet 10,890	4 feet by 3 feet 3,629	9 feet 573	20 feet 108
2½ feet 6,969	4 feet by 4 feet 2,722	10 feet 435	25 feet 69
3 feet by 1 foot 14,520	5 feet by 5 feet 1,742	11 feet 360	30 feet 49
3 feet by 2 feet 7.260			

Standard Weight of Various Articles.

			**	1 1 11
Applesper	bush	48	lbs.	Onions Der bush 56 lbs.
Apples, dried	"	22		Peas " 60 "
Barley	66	48	"	Rape " 50 "
Beans	66	60	66	Rye " 56 "
Buckwheat	66	48		Red Top Seed " 14 "
Broom Corn	**	46	"	Salt Coarse " 50 "
Blue Grass, Kentucky	44	14	66	Salt, Michigan " 56 "
Blue Grass, English	**	24	"	Sweet Potatoes " 56 "
Bran	"	20	"	Timothy Seed " 45 "
Canary Seed	**	60	"	Turnips " 58 "
Castor Beans	"	46	"	Wheat " 60 "
Clover Seed	66	60	66	Beef and pork, per bbl., net 200 "
Corn, shelled	66	56	46	Flour, per bbl., net 196 "
Corn, on ear	**	70	**	Salt, per bbl
Corn Meal	66	50	66	Lime, per bbl
Dried Peaches	"	28	**	Hay, well settled, per cubic foot 41/2"
Flax Seed	"	56	66	Corn, on cob, in bin per cubic foot 22 "
Hemp Seed	"	44		Corn, shelled, in bin, per cubic foot 45 "
Hungarian Grass Seed	46	50	66	Wheat, in bin, per cubic foot 48 "
Irish Potatoes	"	60		Oats, in bin, per cubic foot 251/2"
Millett	"	50	66	Sand, dry, per cubic foot 95 "
Malt	66	38	**	Clay, compact, per cubic foot 135 "
Oats	66	32	68	Seasoned Beech Wood, per cord5616 "
Orchard Grass	46	14	46	Seasoned Hickory, per cord6960 "

Poultry Supply Department

In connection with our seed department, we carry Poultry Food, Poultry Remedies and Supplies of the HIGHEST STANDARD OF QUALITY. We feel that at the present time we have one of the most COMPLETE POULTRY DEPARTMENTS in Michigan. We aim to carry the HIGH GRADE MERCHANDISE which the poultry raiser of today demands. Our prices you will find reasonable and your trade will be sincerely appreciated.

Yours truly,

ALFRED I. BROWN SEED CO.

POULTRY FEED

Prices Subject to Market Change



"GLOBE" SCRATCH FEED-A balanced grain ration, poultry feed for grown fowls. (Strictly high grade.)

Made from Wheat, Kaffir-Corn, Cracked Corn, Barley, Buckwheat, Oats, Grit, Oil Cake and Sunflower.

Per	Πb.	\$.021/2
Per	100	tbs 1.85
Per	100	Tbs., without grit 1.95



"SUN" CHICK STARTER-A primary grain feed for baby chicks up to 20 days old-(Extra small grade.) Made from Cracked Wheat, Cracked Kaffir-Corn, Cracked Corn, Cracked Green Peas, Millets, Steel Cut Oats and Grit.

Per	tb.	\$.03	
Per	100	Tbs 2.20	



ALFALFA MEAL-

"CRESCENT" CHICK FEED-A complete grain feed for chicks until 8 weeks old. Made from Cracked Wheat, Cracked Kafir-Corn, Cracked Corn, Millets, Hulled Oats and Grit.

Per	100	tbs.	 	 2.10

Per Per	15
Per Per	BEEF SCRAPS— \$.04 100 fbs
Der	BLATCHFORDS CALF MEAL— \$.04 1b
Per	CHARCOAL, fine, medium, coarse. \$.03 15
(Dan	GRANULATED BONE, both poultry and chick size. 15
Per	HEMP— \$.06 1b \$.06 100 fbs. 5.00
Oar	MICA GRIT, poultry and chick size. 10
Per Per	MILLET— \$.03 1b

GLOBE E G G MASH



"GLOBE EGG MASH-Contains falfa Meal. A selected mixture of ground feed, manufactured from the choicest sound, sweet and wholesome grain. It is carefully prepared, and contains ingredients in proper proportions essential to the health growth of the fowl, and especially as a supplementary feed for production of eggs. Contains Alfalfa Meal to furnish the green matter for winter. Also contains Oil Cake.





"KING" PIGEON FEED-A carefully mixed balanced ration of sound and sweet grain, and special seed best adapated for Pigeons.

Made from Fancy Wheat, Cracked Corn, Kafir-Corn, Field Peas, Hemp, Buckwheat, Millet (without grit).

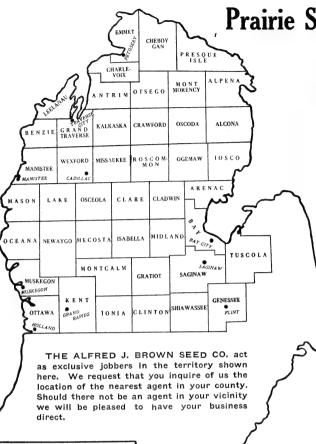
Per 1	Πb.		 	 	 	 	٠.		\$.(J3
Per 1	100	∏bs.	 	 	 	 		 ٠.	2.4	10

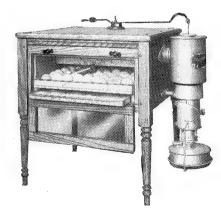
"COLONIAL" DEVELOPING FEED-Coarse Chick. A coarse grain chick feed to meet requirements of growing chick from the time it has outgrown the "Crescent Brand" annuals for the ((Clobel) Seratch Eggd

unti	I lai	ge ei	nougn	IOI. FILE	Globe	Scratcii	i cou.
Per	₩.						
Per	100	tbs.					2.00

P er Per	BEEF MEAL— \$.04 100 fbs. 3.25
Per	OATS, HULLED— 1b
Per Per	OATS, STEEL CUT— 1b
Per	OYSTER SHELLS, poultry and chick size. 1b
Per Per	KAFIR-CORN— 1b
	FIELD PEAS— \$.04 bu. 60 lbs. 2.25
Per	SUNFLOWER— \$.06 100 lbs. 5.00
Per	CRACKED CORN— 1b., Chick size .02, Poultry size

WRITE FOR SPECIAL PRICES ON MIXED TON ORDERS.



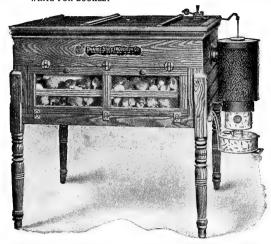


Special new Incubators. 60 egg capacity, \$8.00. 100 egg capacity, \$12.00.

THE COMBINATION COLONY BROODER No. 1.

This brooder house is constructed of tongued and grooved boards. The brooder is full size in all dimensions, 3 feet wide, 6 feet long and 3 feet high in front and 2 feet in rear with the roof. The interior is divided by a movable partition in two compartments; the nursery room and the exercising room or sun parlor. The nursery is double-walled, top and sides, with dead-air space and paper insulation between the board partitions, securing warmth and uniform temperature. A strong point in the nursery is the circular hover without obstructions of any kind, such as hot drums or domes, leaving every inch of inside space available for the chicks. It is open all around. No cold corners or hot spots to crowd into. A glass door in front, 22





inches wide, furnishes light and access to the chicks. A movable board under the door brings the opening level with the door of nursery, and permit easy cleaning of the apartment.

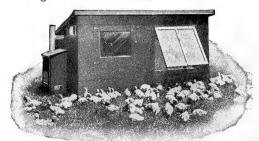
All Prairie State Incubators are of the hot-air type, insuring long life and durability; no tanks to rust out or spring a leak in the middle of a hatch. The outside case, etc., is nicely finshed in natural wood, unstained. The space between the inner and outer case is insulated with 2½ inches of cotton batting, 3 inches on top. The heating system is a combination of radiant heat on the top of machine with the diffusive system of ventilation. In this respect our machine differs from all others upon the market. No diffusion screens, with their faulty distribution, are used. We have the most uniform distribution of heat of any incubator made, and we except none.

VENTILATION.

To develop the growing germ strong in vitality requires an almost unlimited amount of pure, fresh air. Ventilation in the Prairie State is two or three times as great as in any other machine, but does not pass through the eggs; it passes over the eggs. The eggs are ventilated by diffusion perfectly, but are not dried.

MOISTURE.

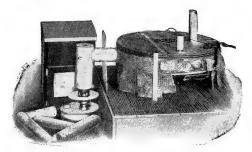
Did you ever notice the hen that steals her nest on the ground? That's natural incubation. And she usually hatches every egg, don't she? We've copied her. We use a wet sand tray, covering the entire bottom of the machine in close proximity to the eggs, thus furnishing the proper amount of moisture and reducing the evaporation from the eggs to the same per cent. (9 to 11 per cent.) as under a hen. This insures chicks full of vitality—chicks that live—just like hem hatched chicks. Non-moisture machines hatch weak, small chicks, of low vitality, hence the heavy death loss during the first two weeks.



No. 1 COLONY BROODER.

Prairie State Universal Hovers

The Prairie State Universal Hover has completely revolutionized the rearing of chicks. No device ever offered to the poultry-raiser has received such endorsement. In cold weather and hot weather, it has been an overwhelming success. As its name implies, our



UNIVERSAL HOVER

Universal Hover has a universal sphere of usefulness. There is practically no limit to its adaptability. As an individual brooder in brood houses alone or in combination with a hot-water pipe system, or may be used as an indoor brooder in almost any kind of building. It may be attached to any form of outdoor brooder two feet or more in height, to any size or form of colony house, shed, coop, piano, drygoods or organ

box. It also enables those who wish to build their own brooders to get the best brooding device possible in an economical manner. It fills that want, felt by every one who raises poultry, for something they can use anywhere, any time, and do the work well.

The hover is twenty-two inches in diameter, the top of which is wood, lined with strawboard, a 4-inch rim extending downward to which is attached six inches of felt curtains. The hover stands on three iron feet, but is not stationary, and may be raised and moved instantly, if desired.

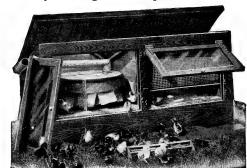
A thermometer is provided, which may be read from the outside without disturbing any part of the brooder. The lamp used is made of metal, using a No. 2 Sun Hinge Burner and a metallic chimney seven inches in length, thus assuring a steady, bright, clear flame; the lamp being on the outside of the brooder in view at all times. Surrounding the not air flue or chimney is a fresh-air pipe through which fresh air slightly warmed, is injected into the upper part of the brooder. This diffuses downward and through the curtains, thus furnishing a perfect system of ventilation. At an aditional cost of \$1 to the regular price, a standard water regulator may be attached to the hover by the use of which a uniform temperature can be maintained without close attention. It is not essential, but a great convenience during the cold, changeable weather and greatly aids the operator in supplying the desired conditions for newly hatched chicks, relieving him of any cause of worry concerning the brood.

THE COMBINATION COLONY BROODER No. 2.

This brooder is similar to the No. 1 in construction and is 60 inches long, 30 inches wide, 20 inches high in rear, and 30 inches in front.

The interior is divided into two large compartments by a movable partition—the nursery room, and the sun parlor, or the exercising room; the floor throughout being on a level, and 8 inches from the ground. Between the nursery and exercising room is an opening 18 inches wide, with a wooden door, hinged to open and close at will, so when desired the chicks may be confined in either apartment. With the wooden door opened, the space is covered with a heavy felt curtain, slitted for easy passage of the chicks back and forth.

Two glass doors, 26 by 14 inches furnish access to the chicks confined. A movable board below the glass door brings each opening level with the floor and permits easy cleaning of each apartment.



NO. 2 COLONY BROODER

PRICE LIST

Taking Effect September 1, 1912.

With Regulator-\$1.00 extra.

UNIVERSAL HOVER.

Price for Hover, with lamp case, smoke con-
ductors; lamp and thermometer \$ 7.00
When used indoors alone, lamp case is not required.
Hover and lamp with smoke pipes and ther-
mometer

With regulator attached, \$1.00 extra.

Large Illustrated Catalog on Request.

Conkey's Poultry Remedies



CONKEY'S ROUP REMEDY is a scientifically prepared medicine. Coming in contact with the membranes of the throat and mouth, the seat of the disease, it kills the germs which are so rapidly multiplying. It is quickly taken up by the system and, belng a strong tonic and blood purifier, it cleanses the blood, builds up the system and assists nature in every possible manner to throw off the disease.

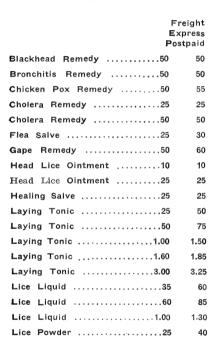
CONKEY'S LAYING TONIC—For the hen to lay the greatest number of eggs, her health must be kept in perfect condition and the egg-producing organs kept free from irritation and disease. There have been put upon the market many so-called egg producers which are irritants, in themselves, while others are simply frauds, producing no effect whatever, and having no value except, perhaps, as foods for which you are paying ridiculous prices.



Price, small size, 50c post paid; large size, \$1.00, post paid.

Price, $1\frac{1}{2}$ tb., 25c; post paid 50c; $3\frac{1}{4}$ tb., 50c; express paid, 75c.

PRICE LIST





DISINFECTANT COEODORANT

Germ Destroyer.

PRICE LIST

	Freight Express Postpaid
Lice Powder50	75
Lice Powder1.00	1.50
Lice Powder	3.25
Limber Neck Remedy50	55
Noxicide35	60
Noxicide60	85
Noxicide90	1.25
Noxicide1.50	.2.00
Poultry Laxative25	25
Poultry Tonic25	30
Poultry Worm Remedy50	50
Rheumatic Remedy50	55
Roup Remedy50	50
Roup Remedy1.00	1.00
Scaly Leg Remedy50	55
Sulphur Candles10	15
Sulphur Candles, 3 for25	40
White Diarrhoea25	25
White Diarrhoea50	50

STOCK REMEDIES

SALT-EM.

This new remedy keeps stock in proper condition. Insures them against worms, off feed diseases of various kinds. Send for special booklet.

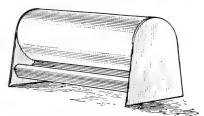
	Freight
10 fb. pails	1.00
20 fb. pails1.25	1.50
40 fb. pails2.25	2.50
100 fb. bbls5.00	5.50

Postpaid Absorbent Remedy1.00 1.25 25 Bag Ointment25 75 Eye Lotion50 25 Gall Salve25 1.20 Heave Remedy1.00 70 Hoof Remdy50 75 Liniment50 Pain Lotion50 75 75 Stock Distemper50 Stock Vigor25 Stock Vigor50

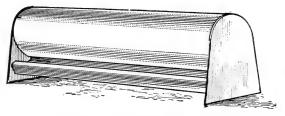


We issue a monthly quotation on poultry foods, remedies and supplies. Send your name and address for our mailing list.

POULTRY SUPPLIES

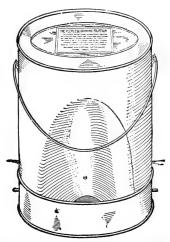


9 inch Hub Chicken Feeder



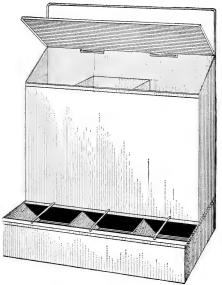
15 inch Hub Chicken Feeder

Is sanitary, keeps the feed clean and dry. Chickens cannot get into it, and cannot waste the feed. It will pay to use the Hub Feeder for small chickens. Chicken feed costs money. The Hub Feeder saves chicken feed. At night turn the feeder ovr backwards until face down and nothing can get Into it. 9 inch feedr, 35c; 15 inch feeder, 50c.



Five Quart Peerless Drinking Fountain

Keeps water fresh. Very easy to adjust. 5 quart, price 60c; 1 quart, chick, 30c.



1-2-3 Poultry Feeder

For Dry Mash, Scraps, Shells, Grit, Charcoal or any poultry feed. When used for one kind of feed only take out separator; for two kinds put separator in one end; when used for three kinds, say scraps, shells and grit, put separator in the middle and you have three separate feeders. Price 75c. Small size, 50c.



Rapid Grist Mill

ls needed in every home. Finished in red and gold. Weight 22 fbs. Price, \$2.25.



weather.

Peerless
Combination;
for Winter Use
The best winter 5
quart fountain heater,
will not allow water
to freeze in coldest

Price, complete, \$1.50

Corn Sheller

With Pop Corn Attachment. Price, \$1.00.



Black Eagle Corn Sheller
Price, \$1.50.



Simplicity Combination Incubator and Brooder

50 egg capacity. Galvanized \$7.50. Copper \$8.50.



mouth Rock eggs and are excellent for laying hens.

Price, each, 5c. Per doz., 50c.

Effective

A Scientific Triumph!

Lasting

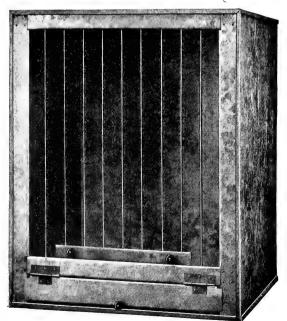
Superior to any other in Form, Size, Appearance and every way. They look exactly like natural Ply-

Not Expensive



Alimetal Square Oat Sprouter

Fifty chicken capacity. Size 15x15x37 inches. Price, complete, \$8 00; 300 chickens capacity Size 19x20x50 inches. Price, complete, \$14.50.



Allmetal Exhibition Coups

Standard size. Swing or slide doors. Price, each, \$3.00. Shipped F. O. B. Grand Rapids in knock down. Double coop, \$5.00.



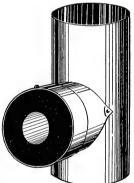
Allmetal Trap Nest

12 inches square, 12 inches deep, each \$1.00. 12 inches square 24 inches deep, each \$1.50.



Allmetal Open Nest

Can be easily set up or taken apart. Will not breed vermin. Size, 12x12x6 inches. Each, 50c; per doz., \$5.40.



Round Allmetal Hot Water Oat Sprouter

Insures green feed for the chickens in winter. Built in sections to obtain any capacity. Price, 15 inch base section complete, \$2.50; 15 inch sprouting sections each, \$200; 15 inch top section, each \$2.00; 24 inch base section, complete, \$3.50; 24 inch sprouting section, each \$3.00; 24 inch top section, each, \$3.00.





Allmetal Chick Feeder

Length, 14 inches. Feed from both sids and keeps chickens out of trough. Price, each, 20c.



Alimetal Wall Feeder

15 inches long. Dry feed and table scraps. Price, each, 25c.

We issue a monthly quotation on poultry foods, remedies and supplies. Send your name and address for our mailing list.

Insecticides and Spraying Material

Tree Tanglefoot





Tanglefoot prevents insects from crawling up the trees. Price, 1 1b. can, 30c; express paid, 60c; 3 1b. can, 85c; express paid \$1.20; 10 1b can, \$2.65; express paid, \$3.00. A band of 3 to 4 inches should be applied and one pound will protect 15 to 25 trees according to size.

Bug Death



nacious powder, and in composition is peculiar to itself, inasmuch as it does not depend upon Arsenic for its killing power. The only insecticide harmless to use which will kill the bugs and insects, protect the life of the leaf and plants, insure highest quality and promote vigor of the plant, tree or vine. Bug Death is not a new and untried preparation. It has been on the market fifteen years. May be used dry or in solution, prevents blight. We give Bug Death our fullest endorsement.

BUG DEATH is a fine te-

Pat. March 16 and Nov. 9, 1897.

PRICE LIST.

One pound package, 15c; packed 24 in each case. Three pound package, 35c; packed 12 in each case. Five pound package, 50c; packed 6 in each case. 12½ pound package, \$1.00; packed 4 in each case.





Perforated top Carton for small gardens, dusting Fowls, Dogs or Cats.

Used from Ocean to Ocean. A light composite, fine powder, easily distributed either by duster, bellows, or in water by spraying. Thoroughly reliable in killing Currant Worms, Potato Bugs, Cabbage Worms, Chicken Lice, Slugs, Sow Bugs, etc., and it is also strongly impregnated with fungicides. Packed in barrels of varying weight, but 8 bbls., average a ton. Prices 1 fb. can, 15c; postpaid, 35c; 5 fb. pkg., 40c; express paid, 75c.

Paris Green

100	tb. keas.	per 1b per 1b	., 16		and 5 fb.		
		and 56 fb.			tb. pkgs.,		
	kits, per	Tb	20		tb. pkgs.,		
				1/4	tb. pkas	each .	

Lime and Sulphur

Per bbl. of 50 gallons, \$7.00. (Refund of \$1.00 for empty bbl.)

Per qt., 20c; per gal., 50c; per 5 gal., \$1.50, including can.

Arsenate of Lead

	Pri	uning	Com	pound	, per	quart,	350	c.		
100	Ħb.	kegs			\$10,00	5	tb.	cans	 	 . 85
50	ſħ.	kegs			. 5.50	2	tb.	cans	 	 40
25	Ħb.	kegs			3.25	1	Ħb.	can	 	 25

Dry Arsenate of Lead

New proces	ss. Write for	pamphiet.	
1 fb\$.40 25 fb.		7.00
6 fb			12.50
121/2 fb	3.75		

The "Kant-Clog" Sprayer

A slight pressure of thumb starts the spray. Remove it and the spray stops instantly.

The "Kant-Klog" is the only nozzle that can be successfully cleaned without stopping the spray or removing nozzle from tree. The first and only nozzle made giving both flat and round sprays or solid streams.

Price, with galvanized steel body, \$5.00; with polished Brass Body. Price, \$6.50.





A New Spray and Force Pump

Farmers with an ordinary amount of spraying put a barrel on their wagon, set this pump in and spray their trees as effectively as their neighbor who uses an outfit weighing and costing five times as much.

Will throw two solid continuous streams, one flat spray and one fine round spray. Has automaic mixer to keep solution stirred, pleases everybody and will last a lifetime.

Price of pump complete, as shown in cut, \$3.50.

Junior No. 5.

The Acre-an-Hour Sifter (patented) is light, simple and durable It is different than any other arrangement for distributing Bug Death and all dry powders. It covers a large or small plant or area at will of operator and is rapid, at the same time economical. Price, 75c.





SEPT, 14, 1909

The most practical and best selling implement for applying Bug Death and all powders to plants. Price, 25c.

LOWELL SPRAYE

LOWELL GLASS TANK SPRAYER

No corks to lose out — they have a screw nave a screw cap where jar is filled.

A perfectly DRY PUMP— A perfectly DRY PUMP—when plunger is drawn back no solution is sucked back into ed back into pump cylinder; this leaves VALVES always DRY and PLI-ABLE and ready for use. Pump for use. Pump cylinder being six inches longer



than most other makes allows operator to t and gives no backache. Will spray up stand up straight and gives no backache. Will spray up as well as down.

Solution tank is a one-quart Mason Glass Fruit Jar, which is easily replaced if broken. Price, 75c.

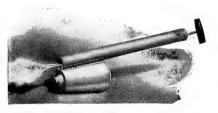
LOWELL SPECIAL SPRAY



Lowell Special Sprayer is a Single Tube Tin Sprayer. The air chamber measures 14½ inch-es in length by 13½, inches in diameter

es in length by 1% inches in diameter. Sprayer is fitted with a 1/4 inch steel plunger rod; special type plunger. The special arrangement of the spraying tube is such that it thoroughly breaks up or atomizes all oils and solutions into a fine mist-like spray which penetrates all cracks and crevices. The sprayer is adapted for all kinds of general spraying and is used very extensively for spraying disinfectants, etc. Price, 50c. Price, 50c.

The Lowen rand Sprayer as an air mber in the Grand chamber and of pump cyl-inder which prerents any mois-ture from the solution tank being drawn back on the valves. Instead of an air cham-



of an air chamber extending from the pump to the solution tank, as in our Glass Tank Sprayer, the Grand is so constructed, with its tapering form of tank, as to allow the us of two short, straight brass solution or spraying tubes to extend upward, connecting with the outlet of the pump direct, thus directing the spray from the end of the pump cylinder instead of solution tank.

The pump cylinder being six inches longer than most other makes allows operator to stand up straight and direct spray at any desired angle giving better results with less labor than with any other make of hand machine. No corks to lose out. It has a screw cap where solution tank is filled. Capacity of tank, one quart. Strong, durable and satisfactory. It is a Trade Maker. Aluminum finish. Price, 60c.

Lowell Continuous Sprayer



Tin. Price, 65c. Galvanized, Price, 85c.

ASPINWALL SPRAYER



Tin. Price, 50c.

OWELL BLOW SPRAYER

some stances pot a to growers, stock ain d poultry raisers prefer to use Paris Green and disinfectants in powder form



In powder form mixed with dry plaster. To meet this demand the Lowell Blow Powder Sprayer is especially constructed, and is without exception the most popular machine of its class on the market. The Ball Valve arrangement is so positive in its action that it is impossible to draw any powder back into the pump cylinder or in contact with the pump valve, water pressure before leaving our fatcory.

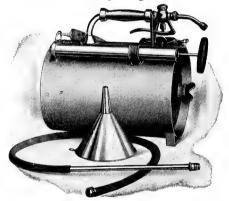
Ball Valve in the end of the pump cylinder furnishes the intake of air and is positive in its action. The powder can has a two inch screw cap opening in back for filling and by our double screen arrangement it is impossible for the machine to clog when powder is dry. The powder can holds one quart and the sprayer has an aluminum finish, giving it an attractive appearance. Price, 65c.



Same general description given our No. (101-A) Glass Tank Sprayer applies to this Sprayer, with exception that it does not have the can screw for filling, it being necessary to repertable for each of the castal for each of the ca

necessary to re move jar to fill. Made in tin only. Price, retail, 60c each.

Lowell Fountain Compressed Air Sprayer



Patented December 3, 1901

Note these exclusive points:

Note these exclusive points:

1. It is devoid of complex or intricate parts.
2. It is both automatic and positive in its action.
3. One charge is sufficient to expel entire contents.
4. Each sprayer is thoroughly tested with both air and water pressure before leaving our fatcory.
5. Having convex heads entire contents can be drained from machine, leaving it perfectly dry when not in use.
6. Heads after being seamed and riveted are dipped into molten solder, making it absolutely air tight and the strongest Air Pressure Sprayer made—standing five times the air pressure necessary to operate.

Tree Attachment, consisting of three feet of % inch 3-ply C. I. Rubber Tubing with spraying nozzle one foot long, for small tree and shrub spraying; Spray Crook nozzle three inches long for potato spraying; Funnel with brass wire strainer cloth for filling, and shoulder strap for carrying furnished with each machine.

Capacity of tank, three gallons. vanized steel. Finish, Aluminum. Material, brass . Price, galvan galvanized steel. Fini steel, \$5.00; brass, \$7.00.

Little Giant Seeder No. 1



This seeder has a steel bow, swinging movement and steel brace, forced feed and pressed tin distributing wheel.

Price, \$1.50.

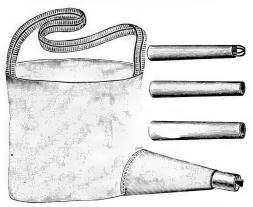
Village Blacksmith Grass Hook No. I



Forged steel and bent near the handle, which gives easy action.

Price, 50c.

Little Giant No. 3



This Seeder Has Been on the Market for Many Years.

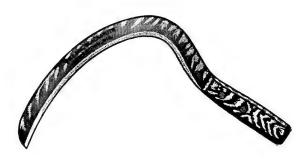
Has a pressed tin four flanged distributing wheel and lathe centered gearings, making it a very easy running seeder. Accurate gauge.

Force Feed!

Steel Frame!

Hand Hold and Shield.

Price, \$1.00.



FORGED STEEL

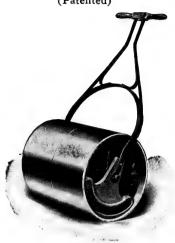
Price, 40c.

Climax Lawn Weeder



Is always ready to grab and hold anything with sufficient grip to remove Root and Branch.

DUNHAM ROLLER BEARING LAWN ROLLERS (Patented)



Face of roller is smooth and aluminum finished; outer edges rounded. The rolls or sections of these rollers are cast iron of the very best quality.

 No.
 Diameter
 Length
 Weight
 Price

 404
 20 in.
 20 in.
 250 lbs.
 Net \$12.50

WOOD HANDLE DIBBLES





ALL IRON DIBBLE Price, 30c.

THE NORCOSS CULTIVATOR HOES

These cultivator hoes are very useful for the garden.

cultivator	noes	are	very	usetul	for the
5 prong	٠				75c
3 prong					5 0c
Midget					95c

DUNHAM WATER ROLLER

(Write for Prices.)



TRANSPLANTING HALE TROWELS

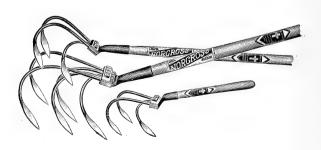


7 inch blade40c

LAWN SHOWER SPRAYER



Price, \$2.00.
Will throw an even spray 25 ft. in diameter.



From_

PUT STAMP HERE

ALFRED J. BROWN SEED CO.,

GRAND RAPIDS,

COR. OTTAWA AND LOUIS 8TS.

MICH.

